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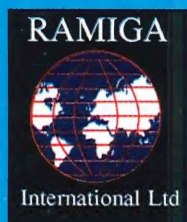
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8 in this issue.

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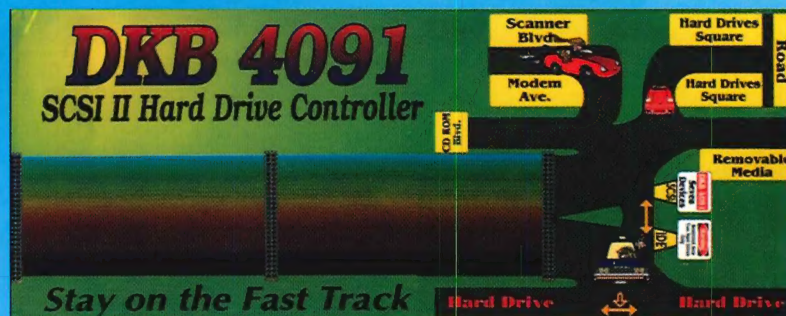
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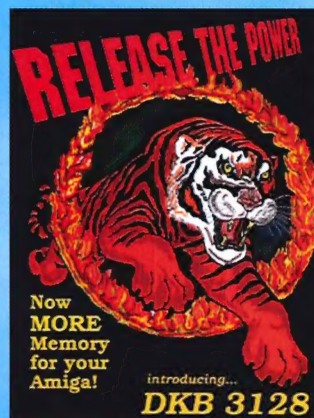
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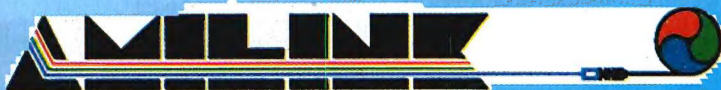
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Amiga Version: Amiga computer, 2mb RAM, AmigaDOS version 2.0 or higher, 3.5" floppy drive, system hard drive. (If using the Video toaster, you will need 9 mb RAM. VT4000 users will need 2 mb chip RAM. When integrating other video equipment, consult manufacturer's documentation.)

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CONSTANT FACTORS

5 The Amiga Dimension

Managing Editor Antony Jacobson comments on how there are lessons for the Amiga that it must learn to survive. The life of the computers like the Amiga, may be getting shorter and shorter especially with the heavyweights getting into the multimedia act.

6 SuperDisk 42

Yet another formidable SuperDisk with 22 programs crunched onto one disk. Travel around 3D worlds in all dimensions, create stunning landscapes by thinking up a number, morph and warp images and create 3D objects. That's just for starters. With so much more to offer, there are even some Workbench games included to help you wind down after it all becomes too much. David Taylor shows the way.



Incredible scapes all done quickly and VERY easily.

9 NewsFile

One step ahead of the field, Anthony Mael and Martin Witton beat the pack to the hot news stories from around the globe. The who, what, when, where, how and why of computerdom nakedly revealed in easy to swallow pearls of wit and wisdom..

44 Edutainment

Can a computer cartoon character help teenagers with English and Maths? Martin Witton puts two packages to a severe examination.

82 The Video Column

Video Effects are great, but there's now a video tutorial on how to make them happen. How apt, says Alan Puzey.

83 The PD Stakeout

In summer hot days, the purse strings may have been opened a little too often for ice cream. Gideon Overhead finds out what software can be bought with what's left of your loose change.

89 Amiga Answers

The ever helpful, omniscient Andy Eskelson waves his wand to solve readers' technical problems. His magic wand that is.

95 Write to Reply

The-ever-so-sharp, but not always so tolerant Bud Vennos lets you air your views, however frank. Of course, you might get a taste of your own medicine.

TEST DRIVE

20 Can't Imagine It?

After all the wait, Barry McCarthy comes to terms with the latest version of one of the best known programs in 3D animation, Imagine.



Have the makers of Imagine 3 snookered themselves?

22 Cat and Mouse

Are you sick of your rodent? Maybe this new control device will cure you. David Taylor looks at Tabby, the low price graphics tablet.

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26 HiSoft BASIC 2

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28 Interplay

Multimedia authoring the easy way. Gary Fenton checks out the final version of latest, perhaps the greatest, but maybe not the cheapest way, of joining the much heralded revolution.



The latest version of the leading Multimedia creation package.

29 Sportster 2

Patrick Howlett sees if this modem is the best way for you to get onto the 'net and into the communications scene.

30 Is That My Amiga Laughing?

Don't let your Amiga be a dumb terminal. Get it to talk back with Maxon Magic. David Taylor transforms his machine.

32 Screenbeat 3

Sometimes a monitor just doesn't do the sound justice. Gary Fenton finds out whether these speakers from Logic 3 do.

34 We're Not Worthy?

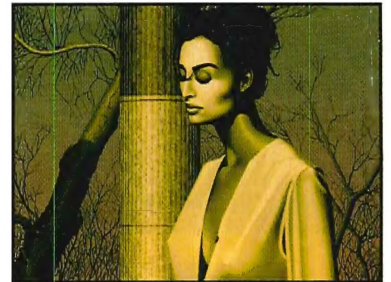
Wordworth 3 finally has the bugs ironed out and a few improvements made. David Taylor puts version 3.0b to the test.

36 2 Many Fonts

Fonts full of pictures are reviewed by the curious Graham Baldock. (Contains full fontal shots that may shock some readers.)

38 Free to Exchange

A CD designed for use by both CDTV and CD32 owners brings lots of animations, demos and utilities to a new audience. David Taylor digs up the treasure trove.



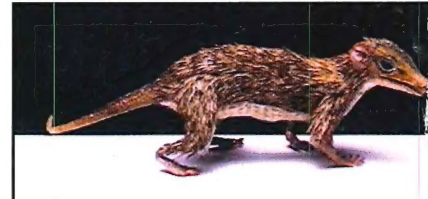
One of the top quality images accessible to Amiga CD users.

39 D-Sam

A new Amos library test driven by Paul Overaa.

46 65 Million Years Ago

Optonica probably feel like they've been working that long developing this CD. At last, Dinosaurs, their interactive educational CD for CDTV and CD32 owners has arrived. Martin Witton tames the beast.



Was this little rascal at the bottom of the dinosaurs' extinction? Ask Optonica's disc to tell you.

USER PORT

40 DPaint Goes Pro

How to make images for television on the tried and trusted Amiga paint package. Artist Wil Moberley reveals his trade secrets.

68 No Amiga is an Island

Aitor Ibarra shows you why, in these enlightened days of file exchange, your Amiga needn't be left in the cold and shows you how to get it to join forces with the PC and Mac (if you really must).

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78 Programming Tips
It's not often that you need to delay your computer. Paul Overaa shows why you might want to and how to do it.

80 AReXX Info
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HARD COPY

79 It wasn't here last month but it is here this issue. The Bruce Smith tome that makes disk drives easy reviewed by Jeannie Lawrence.

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You Can Make It On Video!
From amateur to professional, every aspect of linking Amigas and video is examined by Gary Fenton. Which genlock will suit your needs without breaking the bank and how do you become a videast? All you need to know and didn't realise that you could.



SPECIAL OFFER

81 AUI Subscription
Save money, time, sweat, heck, save the planet (well, perhaps not). Subscribe to AUI today!

70 Entertainment Now!

David Taylor and Andy Moss check out the latest leisure releases for the Amiga.

Sierra Soccer (Sierra) . Ryder Cup Golf (Ocean) . Banshee (Core) . The Ultimate Pinball Quest (Infogames) . The Incredible Crash Dummies (Virgin) . Vital Light (Millennium) . Armour-Geddon II (Psychosis) . Apidya (Team 17) . European Football Champions (Hit Squad) . Archer Maclean's Pool (Hit Squad) . Hits for Six Vol.6 (Prism Leisure) . Hits for Six Vol.7 (Prism Leisure) . Hits for Six Vol.8 (Prism Leisure)



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...And What They Used

Commodore's Amiga A3000, A2000, A500, Citizen's Swift 240C, Canon's BH-20 Bubblejet, Consultron's CrossDOS, Electronic Art's Deluxe Paint IV, Gold Disk's Professional Page, GVP's A530 Turbo, Toshiba's IDE drive, Supra's V32 Fax Modem, Datel's Action Replay MKIII, ASDG's Art Department Professional, Epson's GT-6500 colour flatbed scanner, Readysoft's AMAX, OpalTech's Opalvision, Innova-tronic's Directory Opus, JCL's ColourPic Plus and Cabaret, John Veldhuis' VirusChecker, JVC's HR-D980 Video Recorder, Micro-Sys-tem's Scribble!, Macro Systems VLAB, 32bit RAM from First Choice Computers, Discovery Software's Grabbit.

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The Amiga Dimension

An encouraging piece of news is of a possible buy out of Commodore headed by the UK Commodore senior management. The industry newspaper, Computer Trade Weekly, reports that CBM might be taken over and its strong UK base become the centre of the Amiga world. If it happens it could be the best course for the Amiga and everyone in the Amiga Dimension. Even if the Amiga emerges as a UK based organisation, all the problems won't have disappeared overnight. There is plenty of lost ground to catch up. But nothing is impossible, especially in the ever surprising computing industry.

I sat next to a senior IBM person at a lunch recently and we commented on how the world of IBM, the largest and once the most powerful company in the world, had changed. IBM invented the personal - business - computer in 1981, the XT, but hooked on the mainframes, let their leadership slip away. "Mainframes were macho," said the IBM manager ruefully.

The conversation took place on the day that it was reported that Compaq, once very much a minnow to the IBM whale, had taken over as the world leader in PCs. Compaq knocked IBM off by what has been called "commoditisation" of the PC. In other words, they promoted the idea of the computer as just another thing you could buy cheaply and easily, instead of with all the mystique attached to dealing with the largest company in the world and making it a big technical decision.

Compaq established itself as a quality "brand" like Coca Cola or Mars and spent its efforts and money marketing itself as superior to the pack. Probably its machines aren't very different from any other PC. They are all very similar products - and to us Amiga users not very sensational ones at that. But Compaq have been cutting their prices by about a third every year and reduced what they call their "product life cycle", in other words the specs of their main machine, to just 9 months. And, in common with all the PC manufacturers, they are constantly offering better features. Now they are including CD ROM drives with most of their machines.

What has this got to do with the Amiga? Well, if the Amiga is to survive, even if the UK is a good solid market, it will need to compete not just with the PCs but in the same way as successful companies like Compaq do. These days, with the PC invading the Amiga's home territory - literally, the home - the methods used for building a market for PCs will have to be employed for the Amiga, otherwise no matter how much we love it, our favourite machine will be wiped out. It may not disappear from our homes, but it will from the shops and the minds of the new buyers, which will lead to it dying on us as well as no more developers are willing to commit themselves to it.

It will need to follow a Compaq-style process: keep increasing and improving features and keep cutting prices - and quickly, not in years but months. It must find a market niche - maybe multimedia - and market the "brand" as superior to the competitors. The Amiga, particularly in its CD 32 form, has one great advantage as a piece of home electronics - it doesn't look like a computer.

I have often said that the PC won't succeed in the home because people don't want a computer in their living room. I have to admit that I am changing my mind with the astonishing rising sale of PCs. I still think I'm right about the living room, but, of course, there are other rooms, the study or the bedroom. Where are most Amigas kept? The PC is going to succeed in the home, I'm convinced of that now. But, with a low price, high quality and multimedia potential, the Amiga could still beat it in the living room.

The computing world is a ruthless one, if the Amiga gets a chance for survival through a UK management buy out, it's got to take that chance and use it the right way. If it doesn't do it fast and right, it won't get a second chance.

Antony Jacobson
Managing Editor and Publisher

AUI SuperDisk

There are two things you should know about SuperDisk 42. First, the disk uses the FFS (Fast Filing System) which means the disk can hold an extra 50k of data, but it also means that die-hard 1.3 users can't access the disk, so it's only 2.x and 3.x compatible. Sorry, but very few new programs are written now for the older system.

Second, we're using GuiArc, which is Freeware and was programmed by Patrick van Beem from The Netherlands. It's very user friendly and allows you to unarchive as many of the programs as you like in just one go! Here's what to do:

- 1) If you don't have a hard disk, then please format three blank disks. See your Amiga Workbench manual for more details.
- 2) Now, reset your Amiga and boot up from the SuperDisk. Hard disk users don't have to do that, just insert the SuperDisk when you are on Workbench. (If hard disk users encounter problems, then boot from the SuperDisk.)
- 3) Double click on the Superdisk42 disk icon and then double click on the GuiArc program icon. After 10 seconds or so the GuiArc program will appear. Close the "About GuiArc" information window in the centre of the screen by clicking on it or clicking on its close gadget.
- 4) Note that there are two sides to this window and both sides look the same. On the LEFT side click once on the button marked "DF0", with the SuperDisk is in your DF0 drive. Wait for the computer to read the disk directory and then double click on the word "Archives" (it's in blue) that appears in the directory listing on the left side of the screen. "Archives" is the directory on which

Welcome to the September 1994 SuperDisk! This month's Superdisk has an amazing 22 programs crammed on it! David Taylor gives you the lowdown.

the archived programs are stored.

- 5) The right side of the screen should be showing the contents of the RAM Disk which is its default directory. This means that the programs on the left will be unarchived (decompressed) to the RAM Disk on the right. You need at least 1.3 megabytes of free RAM if you want to unarchive all of the programs to the RAM Disk in one go. A1200 owners and anyone else with at least 2Mb total RAM should be okay.

If you don't have that much RAM, then you'll have to de-archive the programs in batches, instead of in one go, or else change the destination to an external floppy or a hard drive.

To change the destination directory from RAM Disk, just click on one of the device buttons at the bottom of the right hand window under RAM Disk. If the name of your drive isn't there then click on the DRIVES button on the bottom right half of the screen. A list of your mounted drives appears, so click once on the drive you want to use. If you have a hard disk called Work: then click once on Work: when its name appears in the window. You can then choose a suitable destination directory on your hard disk if you wish.

Floppy disk users must use the RAM Disk (the default) or an external disk drive (inserted with a blank formatted disk) as the destination device.

- 6) Click once (on the left side) on the names of the programs that you wish to unarchive. You can select as many you want as long as you have enough free space on the destination drive (on the right). If you don't know how much free space you have then try selecting a few files to start with and see what happens. Please bear in mind that all the programs will NOT fit onto a single floppy disk, except a high density disk if your computer can use that format.
- 7) Now that you've selected some files to unarchive, click once on the button marked Ext/Cp on the LEFT side of the window; or you can simply press E on the keyboard. A window will pop up from which you can follow the computer's progress. The window will disappear when everything is finished.
- 8) Hard disk users can quit the program and use the new programs which will be on the hard disk. If you unarchived the programs to your RAM Disk then you must now copy them onto a permanent disk, such as a floppy disk, or else they will be lost when you reset the computer. To copy the programs from the RAM Disk, quit from GuiArc and double click on the RAM Disk icon which is on your Workbench screen. You'll see all the new programs which you've just unarchived appear. Insert a blank formatted disk and drag the new program's icons from the RAM Disk over to the blank disk's icon. The Amiga will copy them onto your blank disk. Only half of the programs will fit onto a single disk, so have another empty disk ready. That's it!

Documentation

Most of the programs are provided with a documentation file in plain ASCII text (or even in AmigaGuide format for those with this option). We strongly suggest that you read these files, which normally tell you how to install and use the programs that accompany them.

If you double click on a text file from Workbench then the computer will try to load the text viewer program which is named in the icon's ToolType. The default text viewer is "c:more" for text files. You can load the text files into most text editors and word processors, or you can change the ToolType to use the text viewer of your choice. (See your Workbench manual regarding ToolTypes).

Alternatively, copy the program More from the SuperDisk's C: directory to your current C: directory.

PROG

4Wins

Whilst you sit and watch Workbench perform some boring task, why not exercise your right to fun with this WB game? A conversion of the popular "Connect 4" game, the computer plays a mean game and you'll need to keep your eyes peeled for its strategy. Put more simply, I haven't managed to beat it yet.

BigAnim

This is the latest version of this brilliant utility. If you've created a fantastic and complex animation (maybe with this month's morphing program, Mini-Morph), the chances are it's too big to play from RAM. This utility will allow you to play it directly from disk and this update can also handle sound.

DieserZug

Another Workbench game, DieserZug is a clone of the famous Worm game. The idea is very simple, collect the pills and lengthen the worm as you move around the box, without doubling back on yourself or crashing into your tail. Very addictive.

EpochMaster V3

Thanks to J. Pritchard for supplying AUI with the latest version of his Time Management system. Now you can organise everything from your calendar and appointments to your finances and your address book. The "Filofax" of the Amiga world brings the power of electronics to your personal organisation, making everything simple to co-ordinate with important information easily stored and retrieved.

You do need to install its own font into your font directory. The Install Font icon will do this for you.

A pleasure to use and an indispensable Organiser.

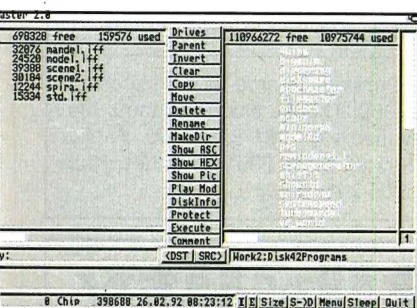
sk No.42

RAMS

DiskSpare

The FFS disk, like this month's Superdisk, can store 879K, a great improvement on the 837K of the OFS. DiskSpare can better even this though and will allow you to format your Amiga Disks to 984K. An added bonus is that because of the system it uses, bootblock viruses are no longer a worry as they cannot function on this system. Read the docs for full details.

FileMaster V2



If you've never used a file utility before, you don't know how easy life can be.

Here's a very useful, small file management program. It allows you perform all the tedious tasks and manipulate files from a very friendly, button driven interface. If you've never used a

program like this before, you'll be amazed at what you've been missing.

MCopy

This is a command that can be made resident, by copying it to your C directory. From shell, MCopy will allow you to copy multiple files from a directory in one go. The docs give you the correct syntax.

MiniMorph



Ring the changes and bring morphing to your Amiga.

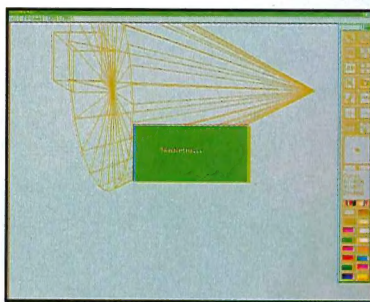
One of the most exciting computing innovations of recent years has been the technique of morphing. It's now possible to experiment with this process yourself, thanks to this easy-to-use morphing package. You'll need two, preferably greyscale, IFF images, preferably of the same size. Then, all you need to do is assign points from the grids to points on your picture. Set the program going and see it transform before your eyes.

The program is surprisingly fast and accurate. Detailed instructions can be found in the archive. Also included are three more programs: ANIMBuild, to link the IFF images together into an animation, ANIMInfo, which, amazingly, gives you a synopsis of any animation, and View, which will play your masterpiece for you.

Model4D

3D modelling is a great idea, but one that leaves many of us baffled with its complexity. This program makes the process easy and is a great way to introduce yourself to the world of 3D rendering. It's very simple to get started, but not easy to stop once you're hooked. This program is an ideal introduction, which won't leave you too confused.

The docs supplied inform you how to create the wireframe and how to create some excellent 3D pictures.



Make 3D objects with simplicity.

PFS

For some people even the Fast File System, which improves access time, isn't quick enough. PFS is yet another improvement to the system and allows you to make your disk accessing even faster.

Reminder V1.1

This small utility will pop up on your Workbench after a defined period or at an allotted time and display a message to remind you of whatever you want. It can even be made to speak the message to you. Your Amiga telling you it's time for bed! What next?!

SceneGenerator

If you can think of a number, then you can now create the most stunning land and seascapes. This program takes an integer and converts it to a fractal land-

The One Stop Archive Shop

The Archives at a glance:

4Wins.lha
BigAnim.lha
DieserZug.lha
DiskSpare.lha
EpochMaster.lha
FileMaster.lha
GUIdocs.lha
MCopy.lha
MiniMorph.lha
Model4D.lha
PFS.lha
ReminderV1.1.lha
SceneGenerator.lha
ShiftIt.lha
ShowStd.lha
SpiraDraw.lha
SystemSpeed.lha
TurboMandel.lha
VR_World.lha



The most amazing scenes, all by thinking up a number.

scape. You can define land and sealevel, snow, green, clouds and water. The program will generate in three modes: preview, medium and high definition. The results can be saved as IFF images for you to use in a paint package.

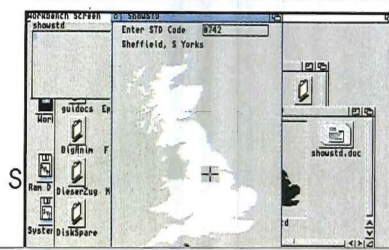
ShiftIt

A little brain teaser in the shape of a Workbench game. The grid will display a jumbled set of numbers that you need to rearrange into order by moving them one at a time.

ShowSTD

From time to time, you get a phone number and think "Where on earth is

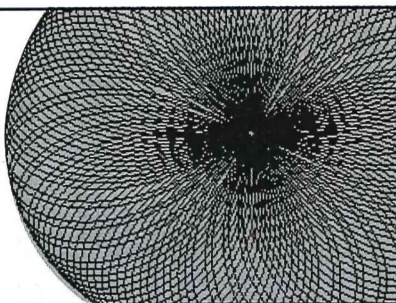
Where does that number come from? Find out.



SpiraDraw V6

Probably everybody played with a Spiragraph as a child. The Amiga will now do it for you and be a lot more accurate. You can alter the size of the wheels and create some brilliant patterns. It's also possible to grab a screen with a picture ripper and then colour them in in a paint package.

Regress and watch the Amiga draw for you.



that?" Now those numbers that you scratch down on the back of beer mats in the pub without putting their name on it can be sorted out - "Of course, it's for Pete from Plymouth." STD will show you where an area code is for any part of the UK.

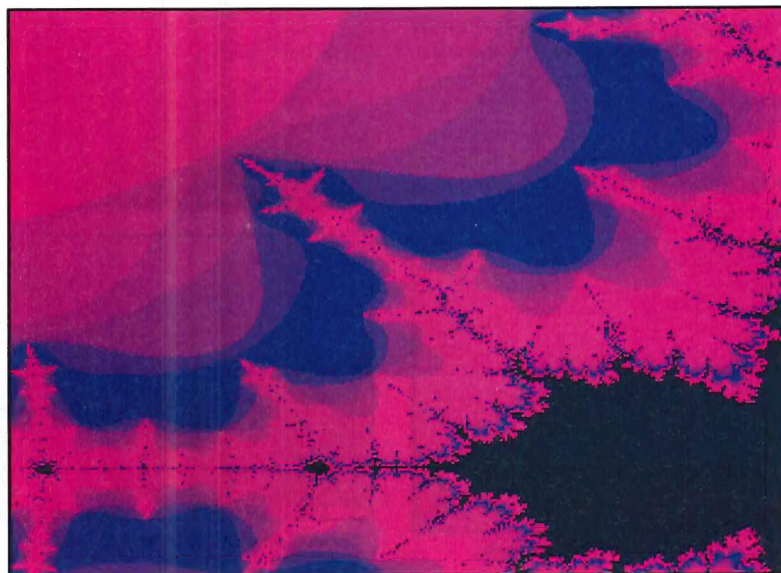
SystemSpeed

This command can be placed in your C directory. It will analyze your computer and give you a comparison of the CPU speed relative to other Amiga models. Simply open a shell and type SystemSpeed.

essor speed. The bigger worlds are much smoother on faster Amigas, but you'll have fun no matter what you use.

TurboMandel

This MandelBrot fractal generator will speedily create fractals for you to play with. There are loads of options to let you customize the picture and several definitions to suit every processor, although it's pretty fast on anything - as long as it's an Amiga!



Speedy mandels produced before your very eyes.

VR World

This program is outstanding. You can move in all three dimensions around 3D virtual world. There are quite a few supplied worlds and will suit any proc-

GuiDocs

There is also an archive which contains the docs for GUIArc, which we archived to give us more space. Unarchive them and read them for info.

Move around the electronic world. Wow!



NO SUPERDISK?

Yes, consult your newsagent! But we've had so many complaints about readers not getting disks that we're trying out a new idea. We can't be responsible for what happens at the end of a long chain of different organisations who handle the magazine when it leaves us, especially outside this country. We know that someone appears to be taking disks off copies of the magazine in some countries but we don't know whether they are being

stolen or taken off as a protection against a large sales tax having to be paid.

So what we propose is this: if you live in the U.K. you will have to consult your newsagent in the usual way. However, if you are outside the U.K. we want to help you get the advantages of the SuperDisk so if you send us £1 in sterling (International Money Order etc) to cover postage etc and we will send you the month's SuperDisk. Okay?

Faulty Disk?

In the event that your **AUI** coverdisk fails to load (because of a read/write error etc), please return it to the following address for a free replacement. Allow 28 days for delivery.

**AUI Faulty Disks,
138 Lambeth Walk, London, SE11 6EW.**

Don't forget to include your name and full postal address in BLOCK capitals. Collector's tokens from the back of cereal packets are not required, thank you.

BBSs

Thanks, as usual, to Simon Gardner of Burning Chrome for his excellent BBS, which you can reach on 0428 727060. Thanks also to Jimbob, the helpful sysop of Walton's Mountain, available on 081 891 5730. Faulty Towers also requires a mention, which is on 0235 535113 as does the Smorgasboard from America, on 0101 205 745 3989.

Compatibility

Workbench 1.3 users can't use SuperDisk 42, because it's a FFS disk for Workbench 2 and 3 owners only. (Upgrade! Upgrade!) All programs run on AGA Amigas and any machine running Workbench 2.x or 3.x, unless otherwise stated (check the docs). We've tried all of the programs on an A500Plus, an A1200 and an A3000 and they work perfectly.

If you can't get a program to work then try reading the documentation on the disk carefully. We've tried to make it as easy as possible for you, but if you do become stuck then boot from YOUR Workbench disk (or hard disk) and try to run the program again. If all else fails, good old Andy will be able to help if you write to him at Amiga Answers, but PLEASE don't telephone!

Readers' Contributions

We are always looking for new and original programs to put on our coverdisk. If you would like to see your name and program feature in **AUI** then please contact **AUI** at the address given in the front of the magazine. Alternatively, give us a call if you think we would be interested in your program (071 487 1072). The shorter the better, under 100k including any libraries - unless it's brilliant! Compiled AMOS programs are welcomed.

Shareware

Just a brief reminder that some of the programs on our Coverdisk are Shareware. This means that you can try them out, but if you regularly use them you should send a registration fee to the author. Registration fees are between £5 and £20 and sometimes the author will send you the latest version in return. You can send an International Money Order, or preferably a cheque but many authors don't accept cheques if they are outside the UK. If you want to risk sending cash in a registered post, it's up to you. We wouldn't advise it but it's your money...

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Compiled and edited by
Anthony Mael and Martin Witton



Colour coming down in price.

COLOUR ME STYLUS

With a projected growth in the colour inkjet market, Epson "are optimistic that their Stylus Colour will meet the demands of both home and office." (What they mean is that they are bringing out a cheap colour printer.)

The Stylus uses the piezo-electric effect with precision ink drop control, given, Epson say, faster print speeds with a lower cost per page.

The machine prints with a maximum resolution of 720 x 720 dots per inch and is said to produce photographic quality colour printing. Low running costs are the major feature.

We've reviewed the black and



white version of this printer and it's very good. If the colour version at under £500 turns out to be as good it will be a very useful printer to have around.

Contact: Epson UK Ltd., Campus 100, Maylands Avenue, Hemel Hempstead, Herts, HP2 7TJ. Tel: 0442 61144.

OS 3.1 UPGRADE

Blittersoft are now taking orders for the official Commodore 3.1 upgrade kit for any Amiga. Two kits are available which include: 3.1 ROM (s), Full English Manuals and Full 3.1 Software Disks. Prices are:- A500/A1500/A2000 version £84.95; A3000/A4000 version £94.95 with £8.00 p+p.

Blittersoft have also told AUI that the new Picasso Video Encoder - PABLO - is now available. The unit plugs onto the Picasso card offering composite and S-VHS outputs. All cabling is supplied as well as the full blown version of the MainActor animation software. The unit will sell for £149.95.

Liana and Ariadne, the networking solutions are also shipping. Liana is a budget two-Amiga system and Ariadne a fast ethernet Zorroll board, offering two additional parallel ports. Both products are SANA II compatible and come supplied with the Commodore licensed ENVOY software.

Liana is £59.95 and Ariadne £249.95. **Contact: Blittersoft, 40 Colley Hill, Bradwell, Milton Keynes, Bucks, MK13 9DE. Tel: 0908 220196.**

Nudge, Nudge Say no MMMore!

Multi Media Machine have been working very seriously on MPEG compression and now offer the ability to put FMV onto CD for a mere £50 per minute John Blackburn, MMM's boss told AUI. This offer has led to many uses, from Karaoke, with, they claim, up to 10000 songs crammed onto one disc to pub quizzes.

Perhaps more interestingly we are about to see the first Electric Disc, based on the Electric Blue video series. It is a "very musical (nudge nudge) glamour FMV" disc. Unfortunately we couldn't get any pictures in time to go to press. Shame.

EQUIPMENT BUT NO CASH

The future of Kington Connected Community Company (KC3) is in doubt as Herefordshire grapple with problems with their experiment in stimulating rural economic development. By providing a community with a package of the latest computer and communications technology, the local sponsors Leominster District Council were hoping to build up tourist and employment interest. However the orthodox approach to regeneration projects according to the Director of Technical Services at Rothwell is to put the first 85% of resources into people and cash and 15% into gear. Kington had put it the other way round. The problem seems to be that KC3 has a lot of gear but no money. Sounds like Commodore.

MUCH BIGGER DISK SPACE

IBM's Almaden California research centre has made multi-layered optical disks which will hold up to 10 times the data of conventional disks and believes that twin-layer double-capacity 1.2Gb disks could be mass produced under a licensing deal within a year or two.

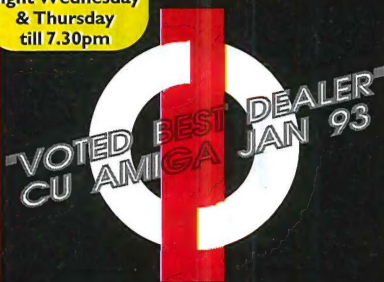
Read-only and write-once CD's with up to 10 layers have been produced, but IBM said that the technique was applicable to any optical format including re-writable discs at moderate costs.

SORRY I'LL READ THAT AGAIN

A leading US based computer scientist has warned that even the best computer screens are not good enough to read extended text, such as newspaper articles or encyclopaedias so that they can be read in comfort.

This calls into question the use of computers in schools to teach reading because Mr Alan Kay said "There is nothing more antagonistic to the act of reading than a conventional computer screen." This raises the problem of whether computers, in their present form are a suitable medium for on-line text retrieval and other information and entertainment services. Mr Alan Kay is better known for being the inspiration behind the mouse and screen 'windows'.

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From the A1 take the turnoff for the A64. This merges with the A58 (by-passing Leeds town centre) which meets the Armley gyratory. After "Living World" at traffic lights take a right, left, left again, & 2nd left to get to FCC.

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Wordworth 3 NEW!.....LIMITED OFFER!.....£64.99

OCTAMED USERS GROUP

The OctaMED Users BBS is now on test. The official opening date is October 2nd, but anyone with a modem can log on during the test period. In fact RBF software are offering a free copy of OctaMED V6 to the three people with the highest recorded logon totals as a way of saying thank you for testing the board.

You can now download TI and all the latest OctaMED related programmes, modules, utilities etc., the easy way, no waiting with direct access to the mailroom, leave messages, or request help from Teijo, Richard or Ray.

**Contact: RBF Software,
169 Dale Valley Road, Southampton
SO1 6QX. Tel: 0703 703446.**



NEPTUNE GENLOCK

Neptune Genlock features a separate microprocessor which controls the auto fading, serial interfaces, signal performance, keys and displays. An alpha channel has been added to the usual punching and fading functions to clearly show a fade-in with an automatic control, without covering the background completely.

The genlock can be placed on standby mode which enables work to be carried out without disconnecting it. With video-enhancer, software control to fade in Scala scripts or to invert the key function it has been designed for all Amigas. **Contact: HiQ Limited, 176 Kenton Lane Middx Tel: 081 909 3885**

CTW'S CBM UK MBO BUZZ

Computer Trade Weekly, the newspaper of the entertainment computer business in the UK, has reported that a new scenario may be emerging to save Commodore. A number of major names of electronic companies have been noised around in connection with the possibility of a take over of the moribund Commodore International - the parent company - that has sought the protection of the Courts in Bahamas where it is registered as a company. The favourites have been Philips, Amstrad and Samsung with the last telling the world that they had been asked some \$100 million and thought that was way over the top for a company in CBM's dire condition.

Now a new white knight may be galloping up on the scene though this time it could turn out to be Commodore's own cavalry on the horizon. According to CTW what is being considered is a management buy out led by current and former Commodore management effectively creating a new Commodore

operating and registered from Commodore UK's existing offices in Maidenhead in Berkshire.

Commodore UK seems to be the only CBM company still operating successfully and is likely to be the spearhead of any salvage operation.

The management buy out is said to be being put together by senior UK and Canadian management figures, research and development staff in the USA. The resuscitated company would be run from the UK while maintaining a research and development in the USA.

Computer Trade Weekly comment that the MBO would mean a smaller, rather less ambitious Commodore operation that would continue the Amiga "without being constantly hacked off at the knees by the old, cancerous, US parent."

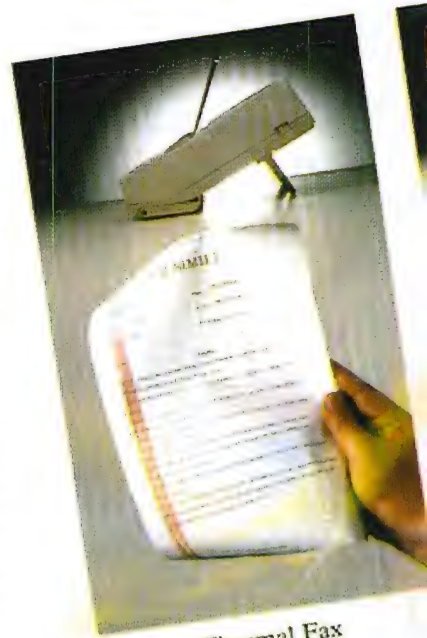
Well, that does sound a bit more of a comfortable position, doesn't it? And at least with the success that the Amiga has achieved in the UK there is a positive record to build on, isn't there?

OH OLE!

Complaints about the length of time it has taken to launch OLE (Object Linking and Embedding) have prompted Microsoft to implement a new version in the Daytona version of NT and the Chicago version of Windows to be released later this year.

Other complaints about OLE include poor operability between 16 and 32-bit applications and the lack of ability to be able to move a single piece of file. Many people in the developing - computer style - world are saying that OLE is the way to go to make the creation of really complex application easy in the coming decade. But the Ole problems are not proving easy to solve too.

GET YOUR FACE CLEAN



Thermal Fax

QUOTES OF THE MONTH

"If the games are garbage it is because the limitations of the people who wrote them, the avarice of the people who sell them and the expectations of the people who buy them" Ivor Berganin, Systems Analyst, City University of Iowa.

Not much more to say about that is there? Except "Hear! Hear!"

♥ LOVE BYTES? ♥

The latest way to meet your soul mate, in the US that is, is to be thoroughly interactive, multimedia-wise! CD Romance is a US CD ROM magazine which lists your suitable partners, supplies you with sketches and then, for the suitably smitten allows you to see your partner in action (doing what?) on a video clip. Anti-virus package not included.

Another sign of the digital times is a marriage that took place recently between Casandra Lehman, assistant professor of computing art at San Jose University in the heart of Silicon Valley, California and Chris Thorne, President of the Riverview Systems Group.

However, the groom wasn't physically present at the wedding. He was at the PC Expo in New York. So the wedding was held through a video conferencing system. The "cyber-space" marriage is said to be a "reflec-

tion of the couple's lifestyle." Now what that means we can't tell you but we wouldn't think that though cyberspace might be interesting it could really replace ALL the fun of a honeymoon.

(Old joke: How can you tell when the honeymoon is over? When a quick one before lunch is a vodka and orange juice. ...New version: When a quick one before lunch is a fast logon to CompuServe.)

HIGH SPPEEED PRINTER

Hewlett-Packard is introducing network laser printers that will print around 30 to 40 percent faster than their predecessors, but they will be priced the same as the models they replace.

The LaserJet 4 and 4M Plus will print up to 12 pages every minute at a resolution of 600 x 600 dpi compared with eight pages for the outgoing model.

GATES OPENNESS

In a recent interview in Playboy magazine, Bill Gates, Multibillionaire boss of Microsoft and now thought to be the

USA's second richest man, has promised to give away all but 5% of his wealth, leaving a mere \$10 million for his children to inherit. He claims he wants to relieve them of the burden of spending his cash when he passes on to the Great Software Company in the Sky.

Cynics may tie his potential generosity to charities to the U.S. Justice Department's inquiry currently hanging over Microsoft's almost monopoly position in the PC software field.

Still it's really considerate of him to "relieve his children of the burden". Especially as he hasn't got any yet and only been married a few months!!

SoftWood Direct



Now even your fonts won't stay still!

ANIMATED COLOUR FONTS

Diskotech have developed what they claim to be the largest possible collection of animated colour fonts for the Amiga. According to Diskotech, many professional video titles which blaze with colour and movement are expensively generated from a handful of animated fonts currently available.

All fonts are compatible with Deluxe Paint III or similar, work on all Amigas in all screen fonts. They can

be used for both animated and static titles and additional graphics enlarge the mix and match capacity.

Five different fonts are included in the new Moviefonts two disk package together with a catalogue disk illustrating over two dozen fonts now available. Price £15.00.

Contact: Diskotech, Melin-Y-Garth, Builth Wells, Powys. LD4 4AW. Tel: 05912 242.

LIVE 94

Make a date in your diary for this year's LIVE to be held at Earls Court 20 - 25 September 1994.

With the latest in technology, electronics, multimedia and edutainment, LIVE is claiming to bring together consumers and manufacturers to sample the delights and even the horrors of tomorrow's world.

LIVE 94 - The Consumer Electronics Show hotline for information and pre-booked tickets 0891 500103.

ANSAFAX

Onyx Associates Ltd have developed a compact unit - AnsaFax which will convert almost any printer into a Group 3 plain paper fax receiver. Andy Hughes of Onyx told AUI "Until now most people have found the cost of plain paper fax technology very prohibitive. A standard plain paper fax machine can easily set you back over £800.00. that is why AnsaFax will come as a welcome development".

For £299 + VAT, AnsaFax is said to be simple to install and "anyone with a printer and telephone can use it." It recognises incoming fax calls, is capable of storing as many as 40 fax pages and will transmit messages for printing. It can also convert a conventional fax machine into a plain paper photocopier so the

thermal paper copy can be produced as conventional paper copy.

In addition it has a PIN number for security.

Contact: Onyx Associates Ltd., Unit 134, North Lane, Aldershot, Hampshire GU12 4QN. Tel: 0252 310595.

TRAVEL KIOSK

Trying to get to where you want to go on holiday on the right dates from the nearest airport seems to be more and more complicated. But now for a self-service holiday booking, you can go to Thomas Cook's Marble Arch branch where they have started piloting the Travel Kiosk sales terminal. Based on Olivetti PC multimedia technology for the system consists of a 17" touch-screen system and video link, telephone and credit card reader.

Customers will be able to watch videos of their choice of holiday destination and learn about the resort or city. A Thomas Cook representative based at a telephone sales centre in Peterborough is linked by live video appears on one corner of the screen to talk to the user and will answer any questions.

To book a holiday the customer presses the button marked 'Book it' and the terminal takes credit cards for deposits and prints out a receipt. This is the kind of development that the Amiga CD 32 has been thought ideal for. It would be cheaper for it than any PC and more flexible. Pity no one has done it so far.

DCC OUT?

Philips Digital Compact Cassette, once boosted as the new medium to replace everything, seems to be on the way out with EMI set to close its US production plant. DCC sales are said to be running at around 4,500 a month compared with average CD sales of 7 million a month. Next challenger, please.



Hide away from the world with a new headset.

AMIVRPRO

AmiVRPro from Megagem has two 96,600 pixel (420x230) pixel active matrix LCD displays and stereo 'bud' type headphones. All displays and optics are on a head mounted visor. AmiVRPro has pivot positioning both at the temples and at the display visor for optimum LCD screen viewing direct into both eyes. The visor position can be adjusted front to rear on a sliding mount, even over spectacles.

Eye separation for the displays is adjustable from 52 to 72mm. Each display's optical focus can be individually adjusted to the eyesight of the viewer. Weighing only 8 ounces it has dual video inputs, stereo audio inputs and brightness and volume controls. Price \$2499.00 (about £1800).

Contact: Megagem, 1903 Adria, Santa Maria, CA. 93454.
Tel: 805 349 1104.

AMIGA WORKBENCH 3 A TO Z

Wow how does he do it? Bruce Smith has produced yet another book for Amiga users - this time for A1200 or A4000. Amiga Workbench 3 A to Z, Bruce Smith told **AUI**, was produced as a result of a calls to the BSB office with people eager to know more.

Bruce Smith's A - Z is said to

contain all the features of the Workbench with a format to make the information instantly available. Included in this can-you-carry-on-without-it guide are in-depth tutorials on setting up the Amiga via the numerous Workbench utilities - Preferences, commodities etc. Annotated and captioned screenshots

are used throughout and, says the prolific Bruce, the entire reference work is written in user friendly language.

Price £14.95.

Contact: Bruce Smith Books Ltd., 106 Smug Oak Centre, Lye Lane, Bricket Wood Herts. AL2 3UG.
Tel: 0923 893493.

PORTER JOINS SCALA

Jeff Porter, former director of advanced technology for Commodore has joined Scala, the Amiga-based information system company, as vice-president of engineering. Porter will head all world-wide research and development activities with offices in Exton, P.A. and Oslo, Norway.

Scala founder and President Jon Bohmer told **AUI**: "Jeff has an extensive background in all aspects of product development. He's a product visionary with excellent ability to sort out new technologies and exploit them. His presence at Scala will help us sustain our increasingly rapid growth".

Porter, who worked for Commodore since 1984, is probably best known for leading the design and development of the Amiga since 1986. Porter holds a master of science

degree in electrical engineering from the University of Illinois and a bachelor of science degree in electrical engineering from Purdue University.

He is co-author of a book entitled Multimedia Systems: The Convergence of Computers, Communication and Consumer Products "I've been a fan of Scala since their first release in 1988. Scala's ease of authoring and low-cost playback make it a natural for interactive television. It is compact and efficient and can be embedded in other systems such as the General Instrument satellite television receivers being developed for Primestar." he told **AUI**.

"The next step is to develop a cross-platform architecture for Scala. We're years ahead of Mac and PC solutions due to our TV centric

heritage", Porter said.

Scala, founded in 1987 in Norway and incorporated in the US in 1992, develops and markets computer-based television information systems and as was recently reported in **AUI** has signed a deal with US communications giant General Instruments to use the Scala technology to develop a set top box for TV. Available in ten languages, Scala say their multimedia tools are used by 45,000 users in more than 40 countries.

Porter's departure from Commodore is not a good sign. He has been with Lew Eggebrecht the brains behind the Amiga development. While he will still be involved at Scala with the Amiga, no computer company can easily replace staff of Porter's talent and experience.

THE EMPEROR'S NEW CLOTHES?

The latest PC Anti Virus Toolkit - 6.65 has been launched by the renowned Dr. Alan Solomon to dispose of any Junkies in the system. The new Junkies virus infects COM and executable files as well as the boot sector partition.

Reflex anti virus hunters claim to have been the first to learn of Junkie's existence because its Thunderbyte scanner managed to detect its presence when other systems failed. David Aubrey-Jones, UK technical

director for software development at Reflex said "An infected boot sector looks just like a standard boot sector and the only evidence of its presence is an increase of 1,027 bytes in infected files.

The difficulty is that the Junkies viruses are so hard to detect that nobody even is sure they exist, (except the anti-virus makers) so they will not know if 6.65 has worked in any case! Hans Andersen would have appreciated that, don't you think?

SPXPRO/SPXSYNC

Also from Megagem is the SPXPRO software for the AmiVRPro HMD. For "stereoscopic 3D real-time wire-frame double-buffered animation capabilities and flicker-free image viewing" (Wow! now there's a memory cracking phrase for you!) it is said to work with the 256-colour display capability of Amiga AGA computers as a high-speed graphics language for general purpose wire frame 3D animation and IFF image display.

Contact: Megagem, 1903 Adria, Santa Maria, CA. 93454.
Tel: 805 349 1104.

YEN FOR PAST PROFITS

Nintendo have suffered the first drop in their profits since 1990. Sales fell 24% in the year to March 1994 to Y485.6bn from Y634.7bn. The drop in both sales and pre-tax profits was blamed on a combination of fierce competition in Europe and the yen's sharp rise against foreign currencies. Nintendo is forecasting that sales will drop again this year.

This isn't surprising Dixons - which including Curries is the biggest electrical goods chain in the UK - has revealed that sales of video games, by which it means mostly cartridges, have fallen by more than a fifth over the past year. You, as a wise Amiga user, may not have noticed it but we are approaching the end of an era. Nintendo certainly have. They are no doubt hoping that their next development the so-called "Project Reality" will bring back the profits of the past. The trouble is that the new development is taking so long that it's being called "Project Unreality". Ah yes, times can be hard especially if you ride a winner just that too far.

DOUBLE DUTCH

Microsoft's Dutch subsidiary has seized 800 pirated copies of Windows 3.1 from two software distributors in the Netherlands. Sold for less than a quarter of the normal retail price, the illegal copies, were distributed under 'an unauthorised label', ("Watch out! These are unauthorised PIRATE copies"?)

According to Business Software Alliance officials about 78 per cent of all computer software programs used in the Netherlands last year was either copies or were used without permission.

ABRACADABRA - IT'S AN ACCELERATOR!

Silica are inviting you to turn your A3000/A4000 into a faster Amiga with GVP's new G-Force accelerator. The 40MHz 68040 processor, 40MHz 68882 FPU built into the processor and 4Mb RAM (expandable to 32Mb on-board or 128Mb with an additional module) are claimed to make an A4000 030 run 12 times faster. Price £1299.00 inc. VAT.

Other modules are planned including a SCSI 2 interface with trans-

fer rates of up to 10Mb p/sec.

Meanwhile Silica have told **AUI** that they intend to reduce the price of the A3000 030 by up to £200.00 to £999.00 inc. VAT, and the 4Mb/540Mb Hard Drive version at £1299.00 inc. VAT. Free software is included to boot(!).

Contact: Silica, 1-4 The Mews, Hatherley Road, Sidcup, Kent DA14 4DX. Tel: 081 309 1111.



At **AUI** we don't always get cut up about what the readers do to us.

Celia's Collage

Celia Farrier of Kent is apparently not only a fan of the Amiga but also of **AUI**. She doesn't, like so many readers, keep the mag religiously but in fact just the opposite finds it's ideal for cutting up and making into collages. Will we see her work with **AUI** at the Royal Academy in years to come? Keep at it, Celia! We've always said **AUI** was cut out for big things.

A Striking Development?

Database users will be able to find out when British rail trains will fail to arrive now that IBM and PhoneLink have launched the Tell-Me service.

Tell-Me is an on-line service that offers access to the British Rail timetable, Thomson Directories, Automobile Association, the Ordnance Survey maps, the British Weather Service, Infocheck- the company information database and the Press Association.

PhoneLink's Boss, Trevor Burke said that the electronic super-

highway has "so far delivered hardly more than hype, but we are going to deliver an ever increasingly amount of services". Yes but will it make the trains run on time or at all?

A single-user licence costs £300.00 per year falling to £40.00 per node for 500 users. (Do you know another 499 who will want to use it?) Data retrieval costs between 12 pence for a telephone number to £24.00 for a company profile. IBM UK will be shipping a Tell-Me demonstration with every PC it builds for the UK market.

COMPAQ RULES

Compaq is the top PC vendor, beating Apple and IBM in global PC sales for the first quarter of 1994, only a couple of weeks after the announcement that it was first in Europe.

According to estimates from DataQuest, Compaq shipped about 980,000 PCs worldwide, compared with 955,000 for IBM and 865,000 for Apple. In the earlier European report published by The Wall Street Journal Europe and DataQuest, Compaq was shown to have sold 11.8 per cent for the quarter the year before. IBM's market share slid from 12.8 per cent to 11 per cent.

But you only get to the top by sacrificing. Compaq has made it through very, very aggressive pricing, cutting its prices by about 30% every year. And when the founder Rod Canion resisted the idea a couple of years back he was found to be obsolete and disposed of..

Compaq are also reputed to be so efficient that they get their suppliers to build right next to their own plants so that they can order goods and receive them within - literally, yes, literally - 15 minutes. 'Just in time' it's called.

NEW 3M DATA PROTECTION

3M, the data storage products manufacturer, has launched a range of 3M Backup Packs which, it claims, will help data users to protect their valuable data.

Research by 3M among people using a personal computer for more than two hours a day revealed that 30% had suffered major data loss of all or most of the information held on hard disk.

Causes include viruses, theft, dirt, flooding and human error, including reformatting the hard disk instead of the floppy disk. Backing up the data stored on computer on a second disk, say 3M, is essential.

They recommend, (they would wouldn't they?) a palm sized 3M Data Cartridge which can hold as much as 120 megabytes of uncompressed data encourages data security. The 3M pack contains six 3M Data Cartridges, a guide to the 6-tape cycle and day labels and is provided in a neat storage box. The six day cycle allows for two Friday tapes for alternate weekly copies of the entire disk and four tapes to save the daily changes on Monday to Thursday.

Think it's a silly idea? So did many people at the launch of that other 3M invented "silly" - the Post It note. Now those sticky ended yellow bits of paper

QUOTES OF THE MONTH

"The killer application is the phone jack." Robert Stevens, Compaq's Head of Corporate development.

This talk of killer application is getting even more widespread, The phone jack? That's pretty ordinary for a "killer application" isn't it? But maybe that's what necessary to get the world turned on to a technology, something so simple that's it's irresistible. The phone jack may just be that for it will, particularly with the advent of fibre optics, be the communications "window on the world" that TV has been for entertainment, (And the bar called that at the top of the Hilton Hotel in London's Park Lane has been a killer for seductions!)



BARGAIN

The Independent Commodore Products Users Group (ICPUG) is offering half year membership for the six months to 31st December 1994 for just £12.00. for UK and BFPO members (overseas rates on application).

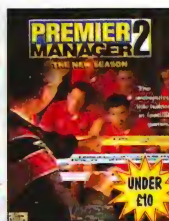
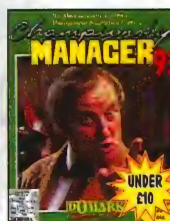
A half year's subscription includes three copies of the ICPUG Journal, use of the Free PD software library, technical help lines and discounts.

Contact: John Bickerstaff, 45 Brookcroft, Linton Glade, Croydon, CRO 9NA. Tel: 081 651 5436.

are everywhere. Tomorrow the data cartridge?

Contact: 3M Data storage Products Group, 3M House, P.O.Box 1, Bracknell, Berkshire. RG12 1JU. Tel: 0344 858447.





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NO12 = will not work on A1200
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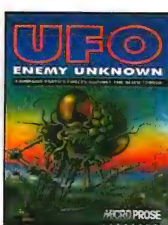
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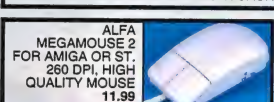
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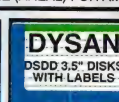
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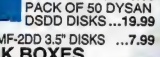
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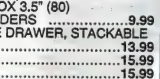
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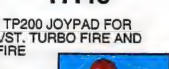
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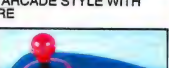
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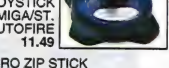
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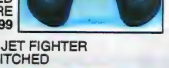
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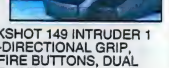
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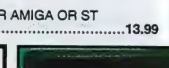
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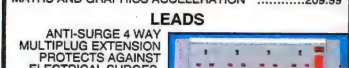


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Voulez-vous parler avec moi ce soir, Mademoiselle See See?

CD MICRO FRENCH

LCL is planning to release CD Micro French, the first ever educational software for the CD32. This will be followed by a PC-ROM version, the first ever GCSE course for the machine, according to LCL. These are new CD-only titles using all the features of the CD and contain six new programs which include the first interactive film-like software.

"Live actors" (as opposed to dead ones?) talk to you "out loud" (as opposed to talking silently?) and wait for your reply before continuing the conversation. (They could wait a long time for some of the people around here!)

CD Micro French is, say LCL, based on Micro French but the potential is greater through the use of interactivity. It comes with a GCSE phrase book and costs £34.99. For a short period after release, owners of Micro French for the Amiga will be offered the CD version for £14.99 with a proof of purchase.

Contact: LCL, Thames House, 73, Blandy road, Henley on Thames, Oxon. RG9 1QB. Tel: 0491 579345.



LARGEST COMPUTER EVENT

Computer Graphics Expo which takes place from 8-10 November at Wembley is set to show the widest range of computer graphics applications software ever presented in Europe, say its boss Gerry Murray. 'Names' include Silicon Graphics who will be accompanied by many of their software partners in the Planet SGI area. Hewlett Packard, seen for the first time at an exhibition in Europe, will display their complete graphics line-up.

The computer games industry has the Interactive Development forum with seminars for games developers and a job centre sponsored by The Guardian. (Want a job with a games company and you're a hot Amiga graphics programmer? This could be the place for you.)

Contact: Computer Graphics Expo, 10 Barley Mow Passage, Chiswick, London W4 4PH. Tel: 081 995 3623.



Keep it all safe, live in the cupboard with your computer.

The latest development from Portastor is the High Security Cabinets which, they claim, provide a hard barrier against theft of easily portable valuables, equipment and crucial documentation.

The cupboards, sorry, High Security Cabinets, come in a range of single or double door, choice of size and fitting and installation is included in the price. Fear eviction? Buy one to live in!

Contact: Portastor Safety and Security Products, Blue Bridge Lane, York. YO1 4AS. Tel: 0904 653040.

YORKS TV CD GOLD

En Marcha!, a multimedia CD ROM from YTV designed to teach Spanish to pupils of all ages, has won the Gold Award in the Education Section of the 10th British Interactive Multimedia Association (BIMA) awards.

The BIMA Awards are the most prestigious mark of achievement in multimedia and awarded after a strict process of judging by panels of experts lasting more than a week. (They now all speak Spanish fluently.)

The disc was presented by Simon Mayo (Radio 1) as a highly professional program praised for both using multimedia and being educational. "It is visually attractive and, well designed and easy to navigate". The disk covers 1400 key words supported by text images and over three hours of audio. Olé!



BBC BIG BASH

The BBC's Big bash, which takes place at the NEC Birmingham from 6 - 9 October is, the BEEB have told AUI, aimed at children between the ages of 7 and 14 and will be according to the BBC, "a fun day out and educational experience". Covering all aspects of children's interests including fashion, sport, entertainment and books the Big Bash will consist of six themed worlds: Style World, Sports World, Real World, Fun world, Future World and Entertainment World.

Children visiting the show will also be able to take a look behind the scenes of a television studio to see how children's programmes are made. Although the show is aimed at 7-14 year olds, there will be a pre-school area especially for younger children.

There will, according to the BBC, be plenty of technological stuff for the kids to ooh and ahhh about. Including the Amiga CD 32?

Tickets are priced £6.00 for children, £8.00 for adults or a family ticket costing £24.00. Ticket Hotline - 021 767 4111.

THE VOICE ORGANISER



Thanks to voice recognition technology you can do away with notepads and sticky notes, we are told. (Oh really? Tell that to 3M). The Voice Organiser will hold and organise the

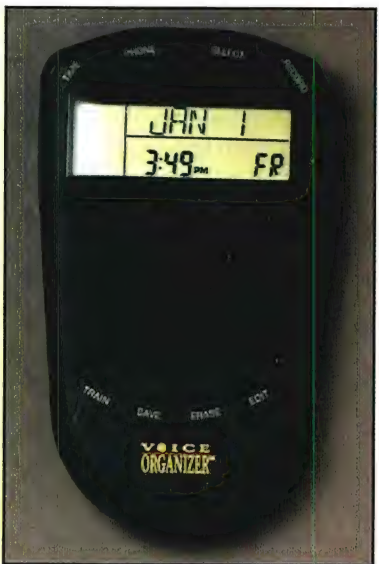
GOTCHA!

ELSPA, the European Leisure Software Publishers Association, which represents the computer and video games industry, has successfully brought a private prosecution against a man found by an ELSPA private investigator to be illegally copying and selling games software.

The prosecution comes in a week when ELSPA has announced that a new raid has recovered 500 CD ROMs alleged to contain over £10 million worth of pirated software. (Wow! That's £20,000 per disk. Some piracy!)

Magistrates at Kettering Magistrates Court in Northumberland found a local man, Phillip Richards, guilty of breaching section 107 of the Copyright Designs and Patents Act 1988. Evidence was gathered by the investigator when Richards sold him four programs for the A1200. (£80,000 worth?) Police raided the house and seized both computer equipment and over 200 computer disks. (The police were last seen clutching some very expensive disks on a fast plane for Venezuela.)

.....



facts, figures phone numbers and appointments, not to mention ideas and thoughts you may forget if not recorded. The Voice Organiser, is said to work in cars, trains, at home or wherever, and will remind you who, what when and where as you talk into it.

With 4 Megabits of memory there is capacity for 400 phone numbers, a calendar for appointments, notebook for reminders and it will keep the information for a year. Price including the plug-in recharger £149.99 + £6.00 p+p.

Contact: Voice Powered Technology International, Unit 11, Banbury Avenue, Slough SL1 4LH. Tel: 0753 676960.

VIDEO CREATOR

Record pre-release sales for Almathera.



Video Creator for the CD32 has already notched up record pre-release sales figures according to Almathera. Published on CD ROM, Video Creator enables users to become involved with their favourite music CDs and turns music into an interactive pastime.

Video Creator allows users to produce effects which have previously only been available on the TV. For the less imaginative, the Random Raves option which comes with Video Creator will automatically create a video display

for selected music.

Almathera have told **AUI** that the new product has been so successful that they are able to keep the special introductory offer for a while longer. The introductory price is £34.95. Now's the time to get this great product which got a very high mark in the recent review in **AUI**.

Contact: Almathera, Southerton House, Boundary Business Court, 92-94 Church Road, Mitcham Surrey. CR4 3TD. Tel: 081 687 0040.

NOT JUST A MOUSE MAT

It's a coaster for dinner plates...it's an elbow rest...it's made out of the same stuff as shoe insoles...it smells funny...it increases your height if you sit/stand/lie on it...it's any colour as long as it is blue...it floats...it's a frisbee... if you stare at it you can see the sky...it's a fan...it's a carpet tile...it's a shin pad...it's a judo mat for gerbils...it's inedible...you can roll it up and look



It's a mouse mat.

through it...it's a small door mat...it's a kneeling mat for one knee...you can frame it...it's a hot dog holder... it's a bib...it's an oven mitt...it's a puncture patch for a jumbo...it's warm... you can write on it...it's one page of a very thick book about Logic3...Oh go on then...stick your mouse on it! It's from Logitech too.

AMIGA CLUB ELITE

Brigade Associates, a professional graphic design company using the Amiga exclusively to aid the various creative processes are to form "an elite professional Amiga Designers and artist's user group" called Amiga Club Elite. (ACE).

ACE would be happy for other professionals to join "their elite band". They say they are pushing the Amiga to its limits and are committed to taking desktop publishing and computer aided creative art and graphic design to higher levels of visual communication. **Contact: Brigade Associates & ACE, Tel: 0788 890479.**

SELECTATAG

Victim of theft? A third of all stolen goods are not recovered because identification is not positive and ownership can not be established or proven.

Selectatag is an automatic, non-contact identification system which connects directly to a computer's serial communications port. The system is based on patented inductive technology characterised by low power consumption and speed operation. Once attached to the subject item the tag receives its power inductively from the reading head and simultaneously transmits back an identification code. It is possible to both read and write to the programmed tag. Information gath-

24 Gigabytes!

Hewlett-Packard has announced plans to develop a high-capacity 24GB digital audio tape (DAT) drive using the new digital Data Storage-3 (DDS-3) format. The format is based on technology developments which triple the storage capacity over the current DDS-2 format.

Increasing the bit density on tape accounts for the significant capacity jump realised in DDS-3. This is the result of optimising the head-tape interface and by incorporating several new innovations, say HP "including the use of a partial-response maximum likelihood (PRML) data channel."

Of course you know what that means. Don't you? Well, you know what 24 gigabytes means. A Fairly Large Amount of Storage...

Logic Chopping!

Last month we put a piece in Entertainment Now! concerning Logic Shop and how great they were - unfortunately we got the wrong phone number (Andy Moss's fault, not ours!) the correct number to contact is Tel: 0992 625323. Sorry to all who went, logically, to the wrong number!

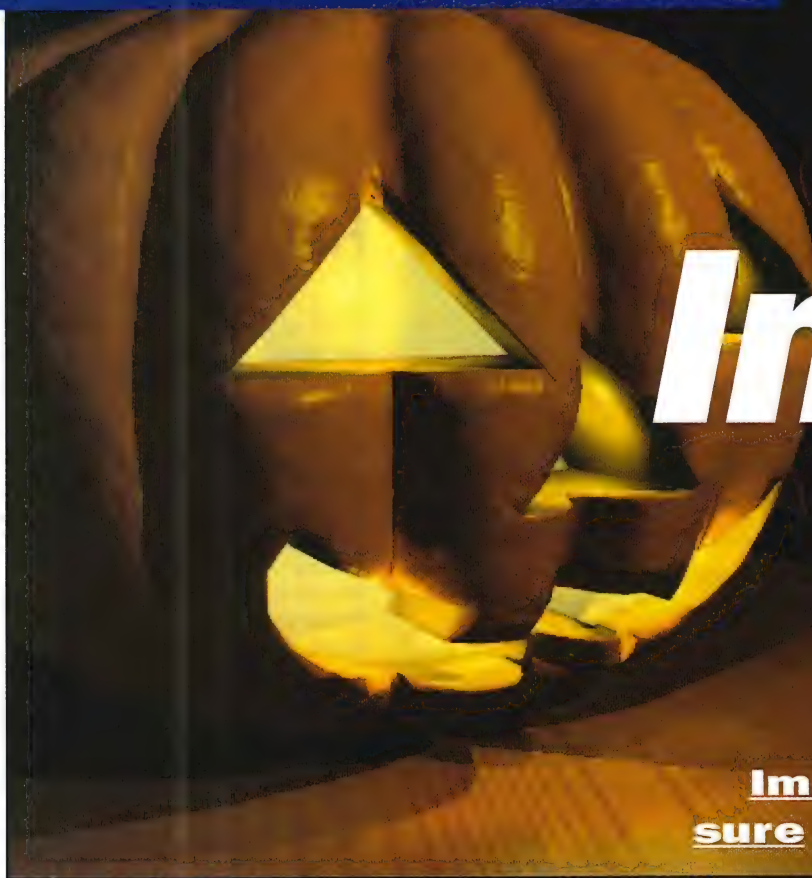


Tag! You're it! OR Tag! You're nicked!

ered in this way is transferred via an interface unit to external data systems.

Too many computers these days take that little walk out to a van or car when the burglars pay a visit. Your Amiga could be recovered - and if CBM disappear probably won't be replaceable either - so marking it for identification could be valuable protection.

Contact: Selectamark Security Systems Ltd., The Gatehouse, 5 Locks Court, 429 Crofton Road, Locksbottom Kent BR6 8NL. Tel: 0689 860757.



Can't Imagine It?

Barry McCarthy has been waiting years for Imagine version 3.0. But he's not sure the wait has been worthwhile.

Imagine 3 - your worst nightmare?

So, finally, after well over a year and a half, version 3.0 of this splendid 3D animation package is here. This has to be a major upgrade. A new interface? All sorts of powerful, high-end effects and abilities? Let's start with a run down on how Imagine works and what its strengths and weaknesses are. What should now have been put right...

Imagine is a modular 3D modelling and animation program. Each module, separately accessed, contains different functions of the animating process. This always sounded like a good idea. Everything is separated into logical sections, making the program logical and intuitive to use. That's the theory.

Imagine had an excellent Modeller. It included most of the tools that you would ever need, to create any

kind of model. There were even custom modules, to create certain types of 'difficult to model' objects. These were the Forms Editor and the Cycle Editor. Both excellent, if a little difficult to use.

Imagine's surface quality and texture controls were also somewhat tricky to get working well, although they had a good deal of flexibility for the time.

The actual animation side of things could be very awkward and lacked some fairly important additions such as spline motion and sliding keys.

Finally, the rendering output was actually very good, when you knew what you were doing. I know a lot of people would disagree with this and say that Real 3D was much better, but that's because Imagine took a lot of learning before decent images were produced, whereas

Real was pretty instant.

So what was good and what was bad?

Good

Modelling; Loads of techniques and easy to see what you were doing. Several novel approaches to object generation, which were genuinely useful.

Rendering; Very fast, without going to full Ray Tracing (Generally not needed anyway). Very flexible and high quality output to any resolution.

Features;

Oodles and oodles of flamboyant features to do things you didn't even know you were going to need to do.

Flexibility;

Always very flexible, it was really

down to the user to 'invent' ways of achieving their goals.

Textures; Provided with a wealth (via Essence I & II) of superbly flexible and very impressive mathematical textures. Often far more preferable to brush textures.

Bad

INCREDIBLY difficult to use; a very steep learning curve coupled with a useless manual (throw it away). Flexibility at the price of user-friendliness.

Primitive and user-unfriendly interface. Also lacking macros and AREXX access.

Fairly limited animation construction. It appears quite comprehensive but again, is awkward and difficult to adjust.

Very difficult to apply and adjust, brush maps and textures. Too complicated and too limited.

Bugs; there are loads and they have been around for several versions! Some of the documented features don't even work or exist!

Fundamental features missing; field rendering is ESSENTIAL for professional looking animations. It's almost got to the stage where, if your package doesn't have it, you can't use it. Automatic spline motion between key points. Another absolute essential in the pro world. Soft edge shadows and light sources, using shadow maps NOT ray tracing. 'Real Time' preview of animations. You have got to be able to manipulate and edit your animation almost instantly, to get that 'intuitive' feel to creation.

I'm afraid that this version of Imagine is a load of, erm, balls!



Support for other formats; DXF is the ONLY universal inter-platform 3D format and simply MUST be supported if you want to be in the global gang. Another area to look at is FONTS. Standard Adobe PostScript fonts should be able to be imported and converted to 3D.

New Version

OK, first impressions. Open the parcel and out drops 3 disks and a new spiral bound manual. No box and no extras. Installation is a little primitive but does the job.

Now, after nearly 2 years of waiting...

Oh dear. Imagine 2.0 with a new start-up screen. That's what it looks like. And yes, you've guessed it, that's what it is. The interface looks no different at all. After 2 years, guys? What the hell have you been doing? No AREXX, No macros, lots of old bugs AND some new ones! Even the option for a non-interlaced interface has gone. Why? I'll tell you, because a non-interlaced interface stops one of the new requesters from opening properly. It's too big to fit on a 256 line display. Nightmare.

I'm not saying there are NO changes to the interface. It does now have an adjustable preview window which is a godsend. It also enables editing directly in this window. Very

effects and qualities.

Bones. Do away with jointed objects. Now you can put bones inside complex objects and by moving the bones, you can manipulate the objects. This makes character animation really easy.

Kinematics. Hierarchical objects can be given constraints, so they move more naturally. Pull a finger and the whole object moves depending on it's joints NOT as a single lump.

States. These have really replaced the Cycle editor, enabling you to hold different sets of information on group, shape and property data, all in the same object.

Softedge light texture. A roundabout way of creating softedge light sources but not softedge shadows.

Different shape lights; round, square and parallel.

Unlimited texture and brush maps, with priority control.

Field Control

New anti-aliasing settings. Harder to use and not much better, I'd like to add.

Latticeize. It creates lattices by creating triangular holes inside each triangular face. Very useful.

Wave. Like the wave effect on the stage, it creates a wave on any object.

Applique. This is Displacement mapping, whereby the bright-

Object Bluing. This is like the 3D version of 'Onion Skinning', where the last position of an object is faintly shown.

Quick Stage. This is what the stage really needs, unfortunately it reduces all objects to blocks based on their axis. Limited use really.

Complex

Well, there you have it. That's your lot, mate. And what a lot it is. The problem with Imagine 3.0 though, is that it is now a much more complex and comprehensive package but it is not really any easier to use. What they seem to have

Conclusion

Disappointed and sad. I love my old Imagine and I've invested literally years in it. I've produced some lovely animations, albeit, with a horrendous struggle at times. So why suddenly change now, when I know so much about Imagine? Because 3D animation programs have not stood still, and nor can I. Imagine is too hard to use. In 2 years it hasn't got any easier.

Everyone is raving about Lightwave. Why? Because the first time you use it, you'll never want to use another 3D program again. It really is that easy and intuitive. It makes 3D



Imagine 3 needs some more money put into R&D.

done, is to simply throw in a whole box full of new tricks and tag them on to old menus plus a few new menus, where they ran out of room. This causes a few obvious problems; Imagine was always a difficult program to learn and use at the best of times. Now it's even harder. Also, we seem to have quite a lot of really clever functions that I'm really never going to use, well maybe once. Imagine 3.0 is out-dated and messy.

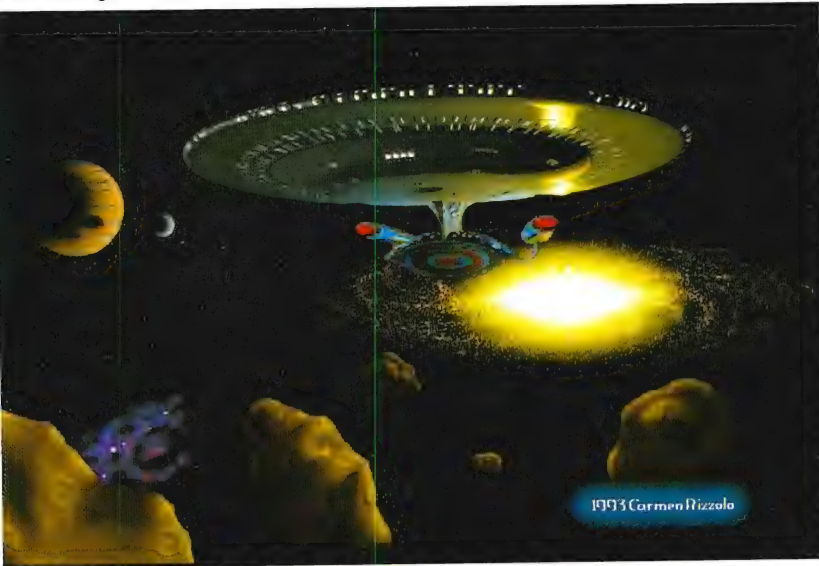
This is what Impulse really needed to do:

- 1 New, intuitive interface, with icon controls, less menus, less modules.
- 2 Realtime keyframing and previewing. The stage is horribly slow and disjointed to use and it's not any easier in version 3.0. After all, this is where all the real animating is done.
- 3 Concentrate on removing all bugs and making the present systems efficient and genuinely useful.
- 4 Add all the ESSENTIAL missing elements that it needs to be truly professional. Field rendering, proper anti-aliasing, proper lights, gas effects, softedge shadow maps and softedge lights. Imagine 3.0 is a superb program, locked inside a clumsy interface, with a few old personal problems hanging around. I've used it since the days of Turbo Silver but it's now been left way, way behind. Version 3.0 is just a touch up, to make it seem more sexy. They should have concentrated on the fundamentals.

animation like the first time again. I look forward to getting in to work because of Lightwave and I get a thrill when I use it! That's what 3D animation is really all about. The program should enable you to free your ideas. To let loose your creativity and imagination. It's just another medium for an artist, like paint or photography.

Imagine gets in the way of your imagination.

I'll wait to see version 4.0 before I'm prepared to use it again. **AUI**



Not going where no one has gone before.

handy indeed. AND it's got a second row of user configurable buttons.

If you were to write down all the separate additions and changes in Imagine 3.0, you would find quite a lot. The difficulty is, that they are all over the place. I'll just give you a basic run down, by editor...

Detail

Deformation Tools to manipulate objects with splines.

Set Zone. Render portions of images for a really quick idea of specific

ness of an image map determines the height of ACTUAL bumps on an object.

Action Editor

Cut, copy and paste. Not from anywhere to anywhere but it does have limited use.

Global FX and more FX lines. Globals such as lens flares and haze can be added here.

Stage Editor

Clone objects on the stage. They still need to be loaded separately though.

RATINGS

Imagine 3.0

FEATURES	83%
EASE OF USE	55%
SPEED	70%
PERFORMANCE	84%
VALUE FOR MONEY	90%

Overall Rating 78%

INFO

Price: £595 (Upgrade from V2: £89.95 + £3.50 P&P)

Contact:

Emerald Creative Technology,
Rapid House, Wandlebank,
London, SW19 1DW.
Tel: 081 715 8866

With two puns rolled into one, David Taylor doodles his afternoons away with Tabby, a cheap graphics tablet for Amiga artists.



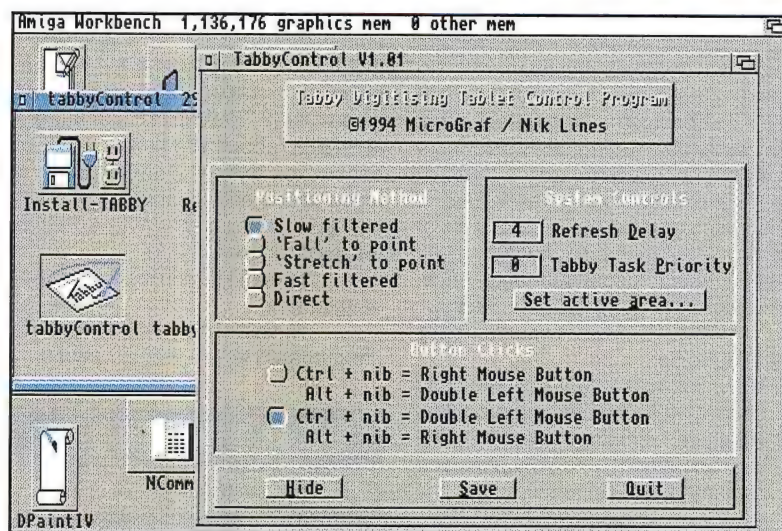
CAT and Mouse

The tabby - a new, cheap graphics tablet that will attract amateur Amiga artists.

down by you finger (this is not a problem), in order to keep down 'interference' and hold the pointer steady on screen. If you don't do this, the pointer will jump around madly. It's also wise to keep the pen away from the tablet when you place it down to use the mouse or the two will start to conflict with each other.

The biggest problem lies with fact that Tabby ties up the serial port. You cannot use the modem. It is not simply a case of removing the hardware, either. If the software is installed, it needs to be removed from the WBStartup drawer, or the comms software will not be able to identify the serial port.

If you are an artist and have always craved a tablet or are used to the technique but never found one cheap enough for home use, then Tabby is the answer. It can throw up the problems I mention, but these are not insurmountable. **AUI**



The control software has a few settings that you might want to define.

Is it called this to raise a smile as you think "Ah, Tabby cat - opposite to mouse" or is it simply an abbreviation of tablet? Am I just being to clever for my own good? (Is the Amiga a computer? ED)

The mouse, now the standard controller for most desktop computers, could be considered a most 'unnatural' way for us to try and draw, which is perhaps the reason that so much of the art we see on the computer is scans of hand drawings.

Until now, graphics tablets, the artist's sensible alternative to mice, have generally been expensive and solely for the professional. Whatever the reasons behind the naming of the

hardware, Tabby control is a small graphics tablet which may allow Amiga artists to revert to the pen and ink style of drawing to which we are more accustomed.

The active area of the tablet is 128mm x 96mm and the position of the pen on the tablet is translated to the relating pixel on the screen. The tablet is really a representation of the screen itself. The documentation, which is short and sweet, describes it as "an absolute device - a particular point on the tablet corresponds to a particular point on the screen."

The nib can be pressed down to act as a left mouse click, which is a good idea, but means that drawing in, say,

DPaint, which requires the left button down to make a mark, is quite difficult.

Tabby is actually designed for the PC, but thanks to a device that converts the connector to an Amiga serial port connector. There is also a driver written for the Amiga (Workbench 2.04+), that can be installed into the WBStartup drawer so that Tabby automatically runs on boot up. It is not too large and does not eat up too much disk space. Also included is a guide to the Tabby in AmigaGuide format, which is useful.

The few drawbacks are that it can be difficult to kick the habit of dragging the pointer as you would with a mouse, which defeats the object of the exercise. Additionally, if you are not using it on a fast Amiga, it is not exceptionally responsive and does not make drawing easy.

The fact that the hardware was designed for the PC also becomes apparent when you start to think about right mouse buttons. The software has had to rely on the keyboard to get them out of this problem. Hence, it is necessary to press a key ('alt' by default) to make the nib press correspond to a right button press. This is just plain annoying, though it must be admitted that right mouse clicks are not needed too often for graphics applications. Given that the mouse remains operational, it becomes clear that menus should still be operated by that trusty peripheral.

There is a metal strip on the top of the pen, which must be kept held

RATINGS

Tabby

PERFORMANCE	75%
EASE OF USE	75%
DOCUMENTATION	80%
VALUE FOR MONEY	70%

Overall Rating 70%

SPEED IS DEPENDENT ON AMIGA

INFO

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Digital Creations launched Brilliance last year into an Amiga market which was desperately lacking a cutting edge paint package. Even though Brilliance is bristling with powerful features and oozes in creative promise, it failed to sell in large numbers to graphics enthusiasts who probably already owned a copy of DPaint or other paint packages.

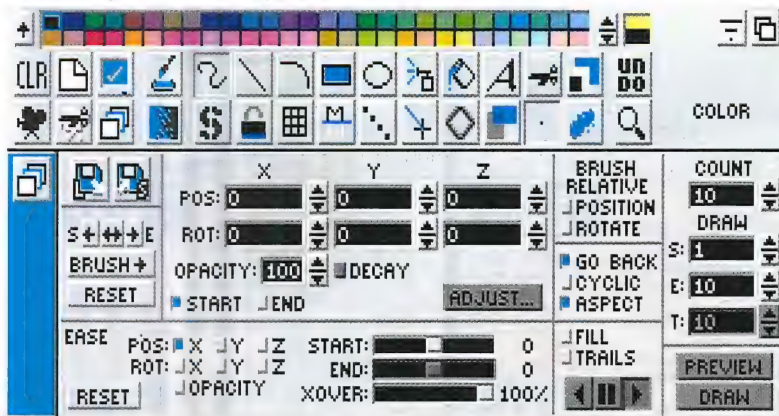
It might well have been the fault of the rather high price tag - £200 in the UK - which left a lot of people out in the cold. It also tempted potential buyers into obtaining a dongle free pirate copy which, incidentally, was available weeks before the official version arrived in the UK.

What's New?

Digital Creations now have seen the error of their ways and have sensibly lowered the UK price of Brilliance 2 to an affordable £89.95. But that's not all. The irritating dongle protection has been removed allowing users to use the joystick port for other applications. (And it stops people from seeking the illegal dongle free pirate version too.)

Several other things have changed in version 2 such as the True View option. I'm sure you've noticed that when you go into magnify mode Brilliance also magnifies the fringing and colour ramping effects which are an unfortunate side effect of HAM. Holding down the True View button will redraw the magnified image and eliminate the HAM side effects producing a very clean image which almost mimics the accuracy of a 24 bit graphics card.

Also new is a rub through mode. This lets you reveal a spare buffer



Brilliance's main menu with the Tweening menu underneath.

through the current one as you draw. It's a bit like rubbing through a page in a book to reveal the page underneath. Combining this effect with transparency can give very pleasing results.

Some minor changes have been made to the Tweening interface, most obvious are the new load and save options for storing tween settings. (You don't have to scribble down numbers any more!). Ease Control has been changed allowing for smoother transitions and negative damping. There are also new keyboard shortcuts for speeding up the way you work, such as Enter on the keypad which immediately enters/exits the tween adjust (3D rotation) mode from anywhere in the program.



Brilliance 2

The Amiga's best ever paint and animation package has just got better!

As Gary Fenton explains.

files. I appreciate this marginal improvement but where is the support for JPEG files or even DataTypes? This is still a very serious omission.

The final new feature is an Animation Presentation mode. This simply displays the first frame of your animation (with menus and the mouse pointer removed) until you hit a key. The animation will play once and freeze on the last frame until you hit a key to exit from the presentation mode.

The font menu now instantly loads the font list without prompting and has an Aspect Correction button which rescales fonts intended for different resolutions. Gratifyingly, long pieces of text will now be rendered as a brush whereas they were previously cropped.

Conclusion

This is really quite a pathetic upgrade from 1 to 2. I would expect such small changes in the program to warrant a 1.5 version number but certainly not a hyper jump to 2. There are still many things missing from Brilliance like a real airbrush, JPEG support, ARexx, and an onion skin mode for animation to name but a few. Oh, there's a slight increase in operation speed which is mildly noticeable due to re-coding of various routines.

Nevertheless, now is the time to buy Brilliance. There's the dongle free operation too - which should avoid

I created this solely using Brilliance and used the new Rub Through feature to bring through an image from my spare screen. I used Transparency to fade in the edges of the rubbed through areas.

tempting you into taking a copy of Brilliance from a friend. The new features just aren't important compared to the massive price drop - and we've heard that there is a special offer that will take the price down below £50! A limited period offer (under £44), from Emerald, is something that no graphics enthusiast can turn their back on.

Brilliance is still the number one paint and animation package for the Amiga which leaves many other packages and computers positively in the dark. Well done DC, but please don't stop development just yet! **AUI**

RATINGS

Brilliance 2

FEATURES	90%
PERFORMANCE	94%
EASE OF USE	90%
DOCUMENTATION	92%
VALUE (AT £90)	93%

Overall Rating 94%

INFO

Price: £89.95

Contact:

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Paul Overaa test drives the new highly upgraded programming package.

HiSoft BASIC 2

Perhaps the best way to judge any product is to put it through its paces to see how it compares with the previous version (which in this case I liked a lot). As with its predecessor, HiSoft Basic 2 can be used on any Amiga with 1 meg or more of memory running Workbench 1.3 or greater. Although for serious users writing large programs a couple of megs of ram and a hard disk are recommended.

The manual has grown with the new version and it's now more than 600 pages. It starts with an easy and very informative tutorial introduction to HiSoft Basic programming. As well as chapters that deal with the editor, compiler and debugger, there is (as expected) a comprehensive command reference section and a mass of technical appendices, hints and tips etc. One of the more important additions is a chapter on HiSoft Basic 2's new operating system support files.

Editor

The new multi-window editor is clearly an offshoot from the work done on the editor provided with the excellent HiSoft's Devpac assembler package. The editor allows you to create, edit, run and debug your programs all directly from the editor itself. The editor makes extensive use of WorkBench 2 style requesters and gadgets and you'll find action gadgets and buttons, checkbox gadgets, radio buttons and gadgets that cycle through various options as they are selected and so on.

You can work with multiple files and even open more than one window in the same file (handy for doing multiple copy and paste operations between different areas because you do not have to keep moving back and forth between the source and destination sections).

The new mouse controlled clipboard cut/copy/paste facilities are good news. Being able to view, and copy sections between, different windows of different projects is a major plus for the new editor. A Search menu now offers improved (easier-to-use, better looking and faster) requester-based 'find' and 'find-&-replace' options, and a bookmark scheme which allows you to use up to ten place-markers within a project is also now available.

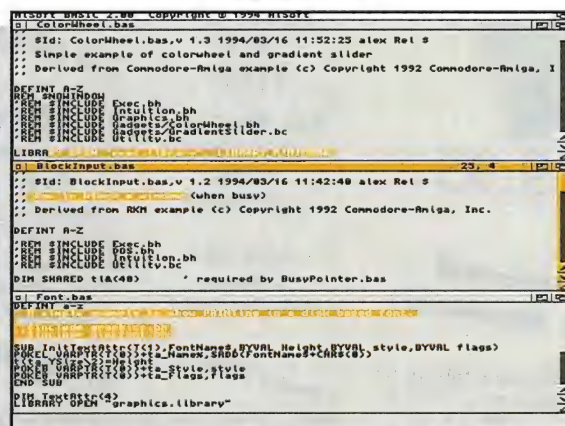
There is a macro facility which lets the editor learn, and then replay, any useful sequences of keystrokes. A Settings menu allows you to set the editor and compiler controls and define

the usual types of global settings for tab size, end-of-line behaviour, auto indenting, automatic back-up creation etc.

Window arrangement is controllable by a menu which allows the view arrangements of the various project windows to be altered (stacked, diagonally offset etc.) Most editor settings can be saved to disk and when the editor is required to create project icons items like bookmark settings can also be stored with the project.

As usual with larger programs there are more options than space permits us to talk about. You are, for instance, also able to make the compiler and/or debugger resident, control font usage, set the editor's printing parameters. Many options have Amiga-key menu shortcuts or Shift, Ctrl or Alt

New HiSoft BASIC 2 editor cut/paste edit facilities - a big improvement.



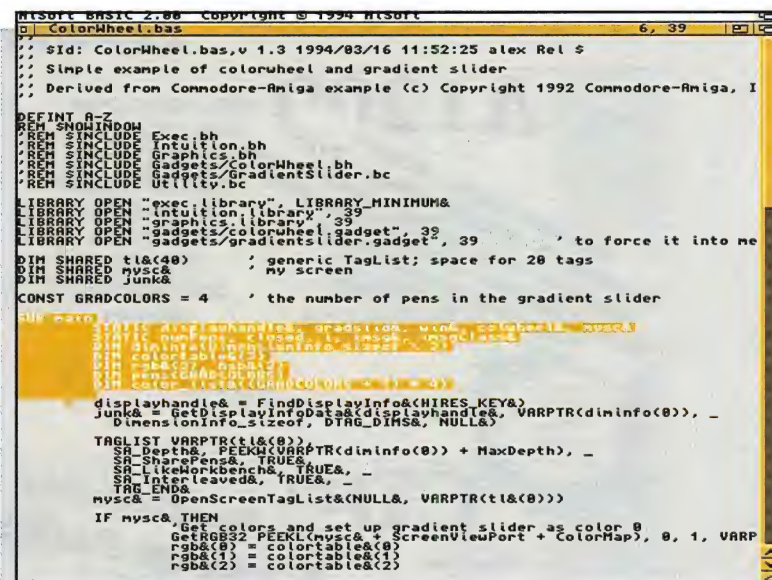
One editor - three separate programs edited in different windows...more windows can be opened if you need them!

keyboard sequences so experienced users can bypass the sometimes time-consuming menu operations if they so choose.

Two versions of the editor are supplied - one for Workbench 2/3 machines and one for Workbench 1.3 users which provides a similar sort of O/S Release 2 feel (the installation process installs the appropriate version for your machine automatically).

Compiler

There are two methods of compiling a program with HiSoft Basic. Firstly, you may use the integrated environment provided from the editor. Secondly you can run a standalone compiler from the shell command line, script file or make file. Obviously the first is easier and the method of choice for most people.



Requester based compiler set up options are extremely easy to use.

The compiler options themselves are grouped into three separate requesters which are called up by selecting one of three items on the compiler settings sub-menu. The 'options' requester provides control over basic compiler operation and includes options to compile either with or without the HBasic2.library enabling you to produce truly standalone programs which require only the Amiga system libraries and any libraries explicitly opened by your program to run.

An 'advanced' requester provides more detailed control (stack and heap size, warning suppression and so on). The third requester provides a range of file path settings for output files, include and library files.

All the compiler default settings are reasonable for normal use and so, in practice, providing you are not doing

anything too esoteric, you'll rarely have to alter more than a couple of settings.

Debugger

It's called MonAm and, as expected, it is the same debugger supplied with the Devpac 3. This is able to step through a program displaying code instructions, 680x0 register contents, processor status, and memory contents in hex or ASCII form. Debug information stored within your program allows MonAm to display your original Basic program labels and presumably this is why it's been called a 'medium-code-level' debugger with this package. The plain fact of the matter is that it is essentially a low-level, i.e. assembly language oriented, debugger that is only of use to experienced users who have knowledge of the 680x0 instruction set.

However, it is certainly a highly effective tool if you know how to use it. Four window types are defined to provide views of processor details (register contents, flag values etc.), 680x0 mnemonic disassembly, memory contents hex or ASCII, and source code. Up to five windows can be shown simultaneously - window 1 can be of any type - windows 2 and 4 can be memory disassembly or source code - whilst windows 3 and 5 are restricted to memory displays only. There's quite a lot of freedom for window arrangement (most can be widened, split and arranged) so there is plenty of display control available.

The disassembler recognises all 680x0 family processor instructions, including the 68040, maths coprocessor and MMU instructions. MonAm windows can be locked to allow interactive monitoring of complex data structures and any number of source files may be loaded into each window along with any associated line number debugging info. Two powerful operators are provided which convert a program address into a source-code line number and locate any part of the program from its position in the source.

multiple serial ports has been provided and you can now access Basic global variables directly from linked assembly language modules.

Functions

There's a whole range of changes for functions and commands: long integer constants plus << and >> shift operators which operate on both longs and integers are available. BLOAD and BSAVE can be used with channels as well as files, and there's a PEEK\$() function which converts C-style strings to Basic strings, along with a set of FORMAT\$() commands which give PRINT USING type flexibility but write to strings rather than I/O channels.

A new FREEFILE function that returns the first available free file number is going to be extremely useful. The idea is that this can be used in subprograms etc., to avoid file number conflicts.

There's an ON CLOSE statement which takes control when a user closes a window and BEGINIO facilities to allow advanced users to initiate asynchronous I/O. Another interesting new facility is the ability to disable reserved words - this can make porting

code from other systems easier and quicker.

One of the most important changes is the introduction of a TAGLIST statement. Taglists are lists of id/value pairs that are used to pass parameters to Amiga library functions and the new Basic 2 statement has been introduced to allow these Release 2 onwards operating system features to be used. There is much improved control over the Amiga's libraries and devices, resources and so on - these may now be called directly from Basic. This 'operating system support' is a major plus for the new package and it is obvious that HiSoft have put an awful lot of work into it.

In order to use the facilities of a given library your program must first inform the compiler which functions the library contains and the 680x0 register conventions required. These details are stored in '.bmap' files which are supplied for version 3.1 of the operating system so you can access all the new features of the latest O/S (these files are backwards compatible with older machines).

Header files (.bh files) which contain all the appropriate library and function DECLARE statements, and

constants files (.bc files) for tag identifiers etc., are also supplied so you don't need to look up these constants and structure offsets in the RKM manuals - you just use the '\$include' statement to identify the appropriate files and the compiler will automatically include them.

Easy Coding

HiSoft Basic has been written to be as compatible as possible with a number of different versions of Basic including the Amiga Basic which used to be supplied as part of the Amiga's operating system software. Most importantly though it has much in common with Microsoft's QuickBasic and the other Microsoft Basics that have set a 'defacto standard' for modern versions of the language on PCs and other machines. If you are going to use the Basic language it makes sense to learn a dialect that will stand you in good stead not just on the Amiga but on many other machines you may be involved with programming (e.g. PC's at work). Another benefit is that it makes it possible to take programs and routines written in other Microsoft style Basics (on other machines) and use them - often with little or no change!

Conclusion

The new HiSoft Basic 2 package is great, and a big improvement over what was already an excellent Basic. The new operating system links are the best and easiest to use that I've seen and the package clearly has an awful lot going for it in this department. HiSoft Basic has always been a well-supported, product and this stability counts for a lot in the eyes of most users. HiSoft Basic 2 is a good long term bandwagon to jump on and I for one will not be hesitating so to do! **AUI**

RATINGS

HiSoft BASIC 2

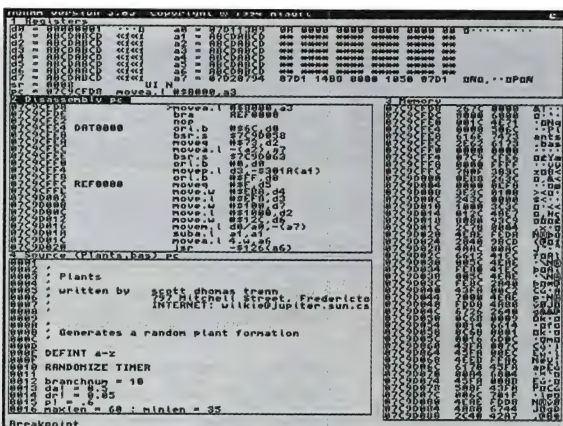
EASE OF USE	96%
FEATURES	92%
PERFORMANCE	94%
VALUE FOR MONEY	94%

Overall Rating 94%

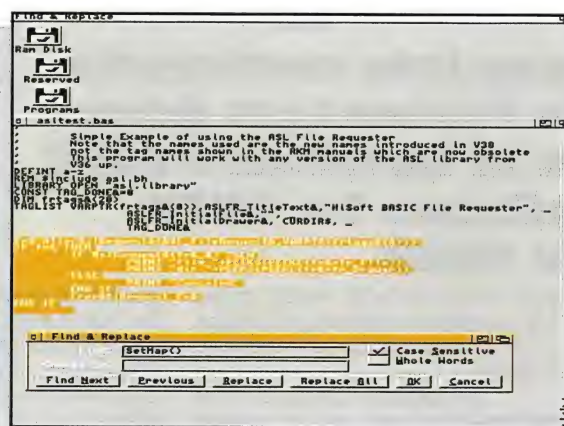
INFO

Price £79.95
Users can upgrade from the original HiSoft Basic for £39.95 (registered Silver and Gold support users get additional discounts).

Contact: HiSoft
The Old School
Greenfield
Bedford MK45 5DE
Tel: 0525 718181



Soft Basic 2 debugger... powerful but needs an experienced user to take advantage of it.

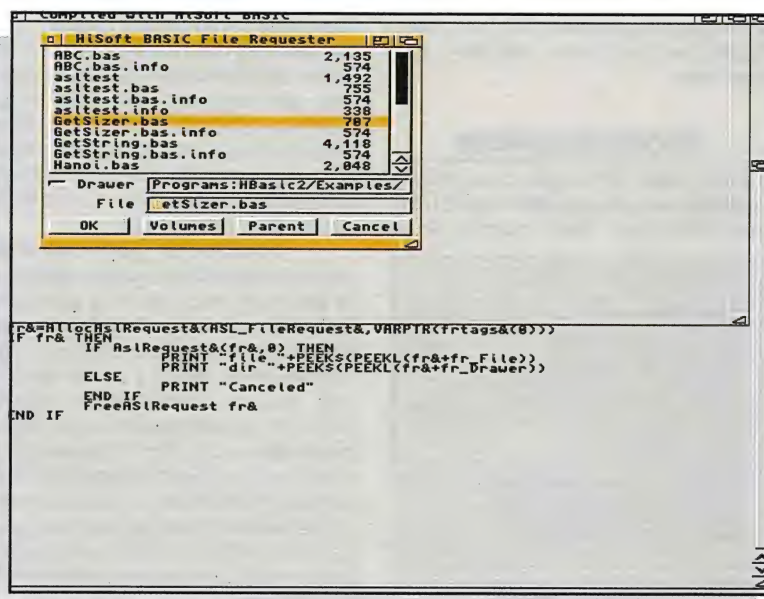


The new editor...very fast search/replace facilities.

New Features

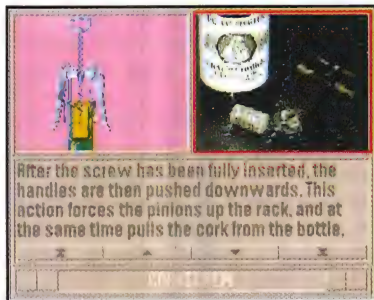
Lots of additions have been made both in the internal workings of the package and the user facilities. Standard compile times are now up to 50% faster and the compiler generated code is both quicker and more compact. A new 'dynamic heap' option which provides more flexible internal memory management has been added which can result in programs using far less memory than an equivalent program running on earlier versions of HiSoft Basic.

Static arrays are now supported for faster array access and screen and palette statements support the AGA chipset. The new editor requesters use properly named compiler options so you no longer need to use cryptic letter commands. Support for



Using features like the ASL file requester from Basic is easy.

Having created interactive CDs myself I was very interested to check out Optonica's much talked about authoring tool. With an easy-to-use environment created specifically for non-programmers, it allows users to concentrate more on the audio-visual content of their CD projects rather than the actual technical side. The release version under review is, according to Optonica's Lee Gibson, even slicker, easier to use, and rock solid than the earlier version we test



Information titles can quickly be created with hardly any fuss.

Looking Dull?

Now for a word about IFF graphic handling. While Interplay supports automatic palette remapping (which is good but doesn't utilise any dithering), interactive screens can be no greater than 320 x 256 pixels in EHB mode (64 colours). Larger resolutions and HAM8 images can be loaded, but, on the present version, they're converted by Interplay down to 64 colours and scaled to fit into a box, created by the user, on a low resolution screen. That's fine for 1Mb CDTV's but what about support the 2Mb CD32 which can greatly benefit from higher resolution screens with 256 colours? Well, we understand that Optonica are working on that.

Interplay will display any resolution and colour depth (like 736x566 HAM8 pictures) but as a separate non-interactive screen. For example, you can create a button which shows a full screen HAM8 picture when selected, though you can't create buttons or anything else on screens



Interplay's authoring screen (bottom) showing the various interactive boxes which can be created in seconds.

Bearing in mind the uncomplicated style of CD titles you'll possibly be, at least initially, likely to produce, you should look at all alternatives before

Interplay

Want an easy way into multimedia authoring? Gary Fenton test drives the final release of Optonica's point and click software for CDTV and CD32.

drove at the end of last year.

If you don't know how Interplay works, the concept is very simple. The user can create as many screens (called pages) as needed. Pages can contain many interactive buttons, and imagery (IFF graphics) can be used as a backdrop or as interactive buttons. Creating buttons is done by dragging the mouse to form a rectangular shape representing the button. Buttons are automatically made interactive and all the user has to do is to tell Interplay what to do when the button is selected.

Multi Media

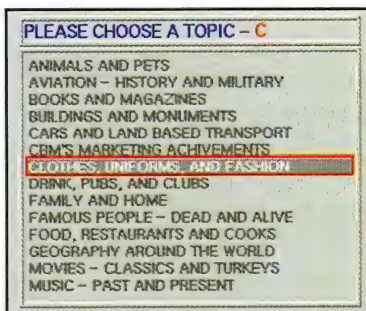
Interplay's support for various forms of media deserve to be praised. Interplay can display IFF pictures, play animations (both anim5 and 8 formats), MPEG Video CD tracks, CDXL, VAXL, IFF sound samples, Amiga tracker modules and SMUS scores, and CDDA (CD audio tracks). Everything is spooled from the hard disk (or CD when a disc has been cut) but animations and sound samples can optionally be loaded into RAM before playback. Incidentally, CDXL files can be played back in double speed mode (300k p/s) and double scan mode on CD32 and A4000 machines.

which exceed 320x256 in EHB mode. This is a real shame and I urge Optonica to reconsider this self-imposed restriction.

One thing in particular that Interplay does very well is creating indices which list words (topics) that can be interactively chosen by the end user. This is a powerful way to lay out information type CDs which have main topics and sub-topics - just like a tree structure.

Conclusion

I have used many types of authoring software on various platforms and I can genuinely say that Interplay is a



Interplay is great for indexing topics that can be found in your CD title.

somewhat restricted but effective tool for the Amiga for creating simple multimedia projects. Click on this and it plays a tune, click on that and it plays and animation, click on this and it does that. If only all computing were that easy...

It's an absolutely perfect instrument for creating information CD titles but because it's not a programming tool you may not be able to include any kind of intelligence into your production. You can only use the tools which Optonica have provided for you, unlike programming packages (C, assembler etc.), which though more demanding, probably offer you increased customising possibilities.

For £999 you get a tool which lets you create CD titles with the greatest of ease and with the very minimum technical knowledge. But if your budget is substantially less you might consider CanDo which allows a similar ease of use, though needs rather greater technical knowledge and expertise, to create titles which might however prove to be more complex than Interplay could achieve. CanDo doesn't possess many of the features that Interplay has, such as built-in MPEG, CDXL and spooling but it might launch external programs to them for you.

Audio-visual support is very good. A sound sample has been selected to play at the same time a picture is displayed.

investing in this rather expensive but undoubtedly very solid authoring product. However, for sheer speed, ease of use (and particularly if you want to produce an information type CD) then Interplay will probably be your only and certainly a highly user friendly choice for Amiga CD production. **AUI**

RATINGS

AMerge

FEATURES	72%
PERFORMANCE	80%
EASE OF USE	90%
DOCUMENTATION	88%
VALUE FOR MONEY	65%

Overall Rating 80%

INFO

Price: £999.00
Contact: Optonica
1 The Terrace
High Street, Lutterworth
Leicestershire LE17 4BA
Tel: 0455 558282

Patrick Howlett test drives a low price way into high level communications.

US Robotics, based in Chicago but with a UK subsidiary, have grown dramatically with the expanding developments in telecommunications. Their products have earned a justifiably good reputation and they have taken this reputation and responded to the growing demand of home users and teleworkers by introducing the Sportster range of modems.

crease transfer speeds according to levels of line noise (background noise on standard telephone lines). So, if the quality of the phone line deteriorates, the speed is reduced to 9600 or further to allow communication to continue and as quality improves so does the speed.

In practice I was achieving consistently high transfer rates of 1600 to 1640 bps roughly equating to 13,000



The Sportster 14400 fax is the top of the range and offers brilliant performance in a neat looking unit.



Although the Sportster range starts with 'budget' models, the higher specification models are even better value, offering the performance and features of their more expensive counterparts at a much more affordable price.

The USR Courier HST is a very well specified modem which performs flawlessly but costs hundreds of pounds. The Sportster 14400 reviewed here has largely the same features housed in a more home computer friendly case and I've recently spotted it for sale at £179. Its small dimensions belie the technical capabilities of this modem, made possible by the enormous development effort at the leading edge of communications, which, of course, trickles down to products like the Sportster.

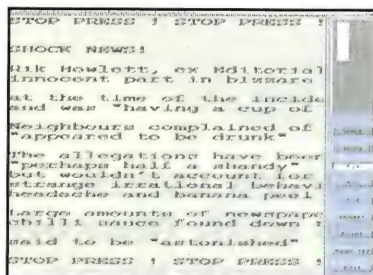
US Robotics make great claims for their own purpose designed 'data pump', the heart of their modems. Most manufacturers source their vital modem components from third parties and USR claim that the 'data pump' offers greater reliability, better upgrading and lower cost. Certainly the Sportster is packed with enough features and comms techno wizardry to faze the average user but whether it can cut the mustard really comes down to its performance (Don lab coat and specs!).

Extra Speed

This modem is designated V.32 bis, which means it can transfer data at up to 14,400 bits per second (bps). It achieves this extra speed over the V.32 standard (9600 max) through the use of data compression techniques. V.32 bis modems are also able to reduce/in-

crease transfer speeds according to levels of line noise (background noise on standard telephone lines). So, if the quality of the phone line deteriorates, the speed is reduced to 9600 or further to allow communication to continue and as quality improves so does the speed.

In practice I was achieving consistently high transfer rates of 1600 to 1640 bps roughly equating to 13,000



The fax capability is there if you need it!

ond), which is 9600 bps, and then builds up to the maximum rate. I found the error handling to be very efficient and able to deal quickly with a wide range of errors.

It's useful to realise the full range of error correction and data compression standards supported by the Sportster. The V.32 bis offers data compression and this is achieved using the MNP 5 or V.42 bis standard. MNP compresses data as it is sent down the phone line but loses out to V42 due to its ability to recognise already compressed files (e.g. Lha or ZIP). MNP 5 can actually expand these files on transmission.

Extensive error correction using MNP 1-4 and V.42 bis are also used, which should ensure largely error free communications.

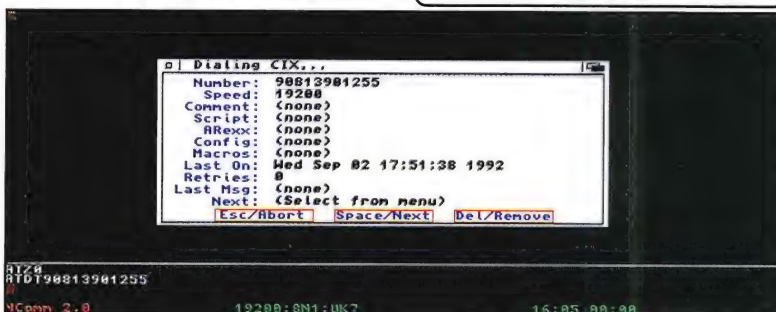
This ensures that the modem can connect to a wide range of computers and modem types with little or no fuss. It really is very easy to forget all the good work the Sportster does as you sit browsing through countless files and messages, racking up the phone bill!

Moving on from its comms capabilities we come to the fax feature. The Sportster 14400 optionally provides group 3 class 1 fax facilities and it is thoroughly recommended. Although no fax software is provided for the Amiga (PC users get Quicklink bundled) check for deals offering GPFax or TrapFax. Both these software packages, while not perfect, are very capable of producing great looking faxes and using them in conjunction with the Sportster is very easy. The fax mode worked first time every time and unlike the Supra Fax (reviewed December 1993 AUI) didn't produce any alarming results.

I quickly built up a great degree of confidence in the Sportster.

Unlike the Supra V.32 bis, I have not experienced 1 dropped carrier, or come to think of it, any problems at all. It worked straight out of the box despite my reservations about the DIP switch settings (was it at MAC User before me?).

Gateway to the world! A modem and a program like NComm opens up the internet to you.



Conclusion

The Sportster used to cost £299, then USR recently dropped the price to £199, but check around and it can be had for even less. This makes it superb value for money and although the Supra costs about the same and comes with ATalk III and GPFax, you can throw away ATalk (Ncomm is the business, and shareware too!).

If you want a well specified modem that almost guarantees trouble free communications, the USR Sportster is one to go for. **AUI**

RATINGS

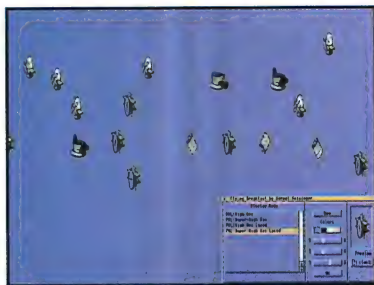
Sportster II

FEATURES	90%
EASE OF USE	90%
DOCUMENTATION	85%
PERFORMANCE	95%
VALUE FOR MONEY	92%

Overall Rating 91%

INFO

Price £199 (RRP) but check for deals
Contact: US Robotics Ltd
224 Berwick Avenue
Slough, Berkshire SL1 4QT
Tel 0753 811180



The Flying Breakfast is one step on from the famous Flying Toaster blander.

The box claims it is "The loudest, most colourful, yet most useful program of all time!" I can't exactly say it fulfills all of these claims, although my Amiga is certainly a very different machine since I installed it.

A quiet A1200, it hardly made a murmur and never issued a rude sound or obnoxious comment. But all that has changed now. It sits there making almost as many Smart Aleck responses as its operator (*Impossible! ED.*).

Recently, I came across a Mac (*Boo! Hiss!*) and found that it was possible to have it make a monkey sound at you when you clicked the mouse. So simple, yet it can be funny.

Maxon Magic is a program that will allow you to turn your Amiga into an all singing, all dancing machine that will make a monkey "eek" look paltry.

Entirely customisable, the program is easily installed, preferably to start on boot up, which means it's really only ideal for hard drive owners who don't worry about memory (and have a sense of fun).

Blankers

Once installed, it is merely a case of setting it up to your 'requirements'. On the initial screen there is a set of screen savers for you to choose from. Some are great while others quite passe.

The Aquarium that gradually gets fished away and the Tetris game are novel, whilst others, such as the starfield and the fireworks are far from new, but still as entrancing as ever.

It is even possible to customize some of the blankers further. For instance, the starfield can be made to scroll forwards or from the side and you can make it rotate to give the effect that you are spiralling into it; the 'eyes' blander can have the number of eyes changed and the 'spotlights' made lighter or darker.

The blankers can be made to kick in after a chosen time and to take into account CPU usage. On the opening screen is also a useful option to speed up (or even slow down) your mouse pointer's movement.

Audio

These are nothing new though and the program's real diversity becomes apparent when you move on to the audio section. Here it is possible to select any of the provided samples (or you can choose some of your own .iff samples - so long as you put them in Maxon Magic's sounds drawer) and link them with events.

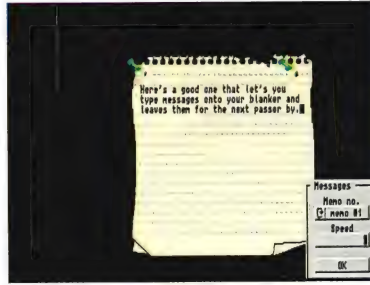
The events range from opening windows or programs to requesters and



Your Amiga watches you with dopey eyes in the dark.



The clock swings across the screen, with time displayed either digitally or in analogue form.



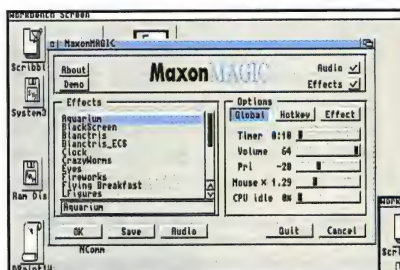
It's possible to leave messages up when you're away from your desk.



The lightning flashes are one of the simpler blankers.

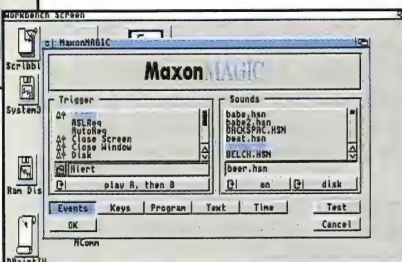
Is that my Amiga laughing?

David Taylor makes some noisy experiments with Maxon Magic, a new customisation package.



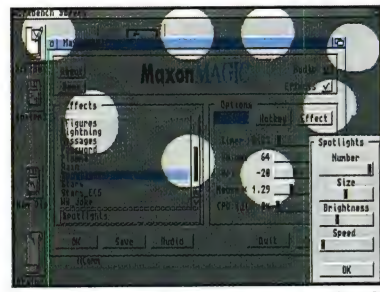
The initial screen to choose the blankers and options.

The wealth of samples at my disposal make my Amiga one of the noisiest around.



disk insertions. Samples can also be linked to key presses, times and program launches.

For this reason, my usually mild mannered Amiga now belches as it starts up, sounds like a typewriter when I write, has Homer Simpson



The spotlights scroll across the screen making it seem like the start of a Pink Panther movie. extolling the value of beer when I boot NComm and plays a fanfare as Directory Opus opens.

Novelty

Once you have it all set up, simply save the choices and your Amiga will continue to deliberately behave oddly from then on. If you want to make a change, then you can go back in by selecting it from the Workbench Tools menu or by pressing the Hotkey (which you can define, just like everything else).

On the whole, Maxon Magic is very well programmed, but I had one crash as Directory Opus tried to play a sample that conflicted with the sample initiated by a mouse click and another when a screen blander got caught out with a left button click.

This program is good at what it does, but it is little more than a gimmick. The few really useful utilities that it provides, such as the mouse accelerator and the password facility, are not numerous enough to draw Maxon Magic out of the realms of novelty software. It is essentially a techno toy for your Workbench, a gadget that amuses. I can easily see that amusement turning to annoyance when you simply want to get down to work and don't need it messing around in the background. Of course, it's easy enough to quit, but that's never the point.

It must be reiterated too that, as with any program that customises Workbench, it is not for those short of memory, money or, really, those without a hard drive.

However, if you crave originality on your Workbench and sit in front of your Amiga all day, then Maxon Magic is certainly unrivalled. Your computer suddenly becomes more alive. If not, then I'm sure you will find other software more worthy of your cash. **AUI**

RATINGS

Maxon Magic

FEATURES	74%
EASE OF USE	83%
DOCUMENTATION	90%
PERFORMANCE	85%
VALUE FOR MONEY	60%

Overall Rating 70%

INFO

Price: £29.95
Contact: HiSoft Ltd
The Old School, Greenfield
Bedford MK45 5DE
Tel: 0525 718181



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Screenbeat

You are not going to believe this because we didn't! AUI has got hold of probably the cheapest speakers and amp combo in the Western world! Gary Fenton broadcasts the news.

Don't Move!

Stylishly designed and barely 15cm tall, each speaker can be mounted on either side of your monitor suspended by a plastic bracket. The brackets are attached to your monitor by double sided sticky pads which means your monitor won't be damaged if you detached the speakers at a later date. Each bracket has an arm which swings forward and attaches into a slot at the side of each speaker.

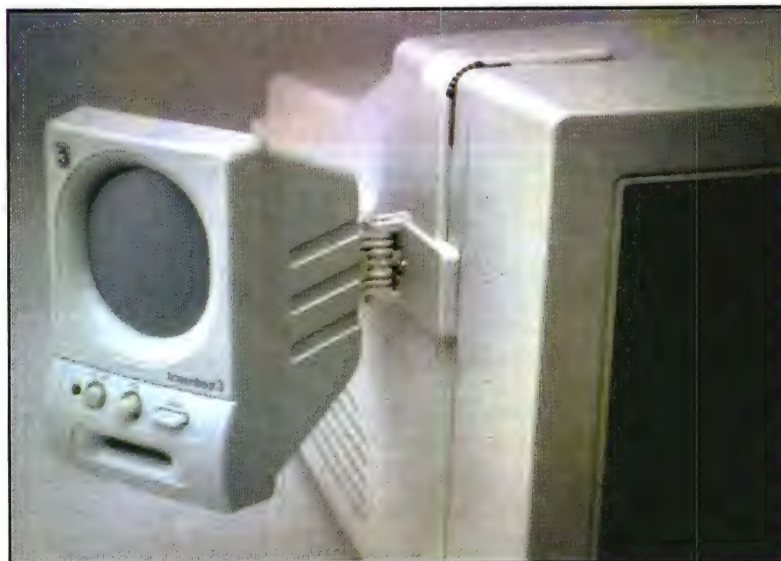
Mounted evenly on a monitor makes the overall system looks pretty good. My review speakers managed to stay up for all of five minutes before taking a bungee jump off the top of the monitor landing with a crash. But these resilient speakers managed to withstand dive after dive without any apparent damage. It must be because of the side impact bars and air bag that everyone seems to be talking about!

A quick call to Spectravideo revealed that it takes three sticky pads

3

Yes, I know we recently reviewed some other speakers and said how cheap they were but that was before Gary Fenton received the speakers made by Logic 3.

on each bracket to hold it safely onto the monitor and not two, which were supplied with our review speakers. After applying extra sticky pads things quickly quietened down as regular cries



They fit neatly onto your monitor and make everything sound great.

of "Jeronimo!", followed by a thud, ceased to occur.

If you think the speakers make your monitor look like Mickey Mouse (the ears) then tiny cushioned pads, which come with the speakers, can be stuck onto the base of the speakers. This allows them to be placed on a table beside your computer.

Acoustics

The sound which emanates from the speakers is by no means bad, and then again it's not that good either. Music lacks depths although the sound certainly isn't sloppy, it can't reproduce high hats and cymbals faithfully without knocking the higher frequencies on the head. According to the specs, the speakers can handle bass as low as 50hz and higher frequencies up to 15Khz.

A bass button on the front of the main speaker (with the on/off button and built-in amp) kicks in an extra dose of bass. Don't expect it to shake the room because it emphatically won't! It adds extra bass which is desperately needed if you were to listen to the speakers in "normal" mode. Yet why am I picking holes in this product? Read the hardly believable price in the Info box at the foot of this page?

Shhhh!

The only thing that I would really like to see realistically changed in this product

is the power output. Each speaker is rated at 2 watts. Pardon? Exactly. If you work in a busy office with phones ringing and people yakking loudly then you'll have to work these speakers hard to be heard over the background noise. If you use your Amiga at home (where I assume it's reasonably quiet) then they're absolutely perfect.

The speakers are supplied with a pair of mounting brackets, sticky pads, and a mini jack to stereo phono adaptor. You have to provide the juice yourself in the shape of four AA batteries or 6 volts from a mains adaptor. Of course, you don't have to use the speakers exclusively with your Amiga. Shove in some batteries and plug in your Walkman and you've got yourself a portable sound system.

Conclusion

The ScreenBeat 3 system is extraordinary value for money. Although they're not quite loud enough to suite my own personal taste (I like my music loud!) they're perfect for use at home or in a small studio. Everything considered, we rate this system very highly and wish everything could be this affordable! **AUI**

RATINGS

Screenbeat 3

FEATURES	72%
PERFORMANCE	68%
LOOKS	90%
VALUE	99%

Overall Rating 78%

INFO

Price: £16.99

Contact:

Spectravideo.

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Northfield Industrial Estate
Beresford Avenue, Wembley

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Tel: 081 902 2211



Small, but perfectly formed, the speakers add volume to your Amiga.

As soon as word processors started to contain commands more complicated than Cut and Paste, bugs appeared in these essential programs. Actually, every program has, or had bugs. This is where beta testers come in, who will faithfully hammer the program to death finding problems so that they can be fixed before the package hits the computer store shelves. Or not, as the case was with Wordworth 3.0.

There have now been 3 versions of this Word Processor and we're not onto version 3.1 yet! Still, if the problems have now been solved, it will have been worthwhile.

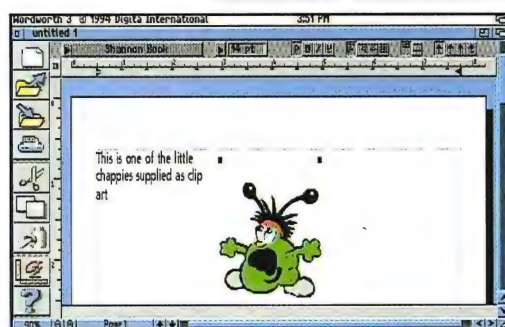
Insecure

Wordworth 3.0 suffered from probably the most bothersome problem that any program can have - instability. Ask anyone who writes at all and they'll tell you some horror story of a WP crashing "just as I was about to save the text". There is nothing quite as likely as this to make you throw away any WP, no matter how many fancy and useful extras it has, and opt for a simple program. I am happy to say that, so far, Wordworth 3.0b has behaved as expected and not died on me once.

Also fixed are the installation problems that beleaguered the original version; floppy disk, printer and fonts can now all be installed without a problem.

We're not WORTHY?

David Taylor holds his breath as he installs the new version of Wordworth - V3.0b. Have all the throat clutching bugs been fixed?



Clip art is a great feature supported by this WP.



and versatile as Wordworth, it's understandable.

Help files now load on the A1200 and the problems with loading ASCII files has been resolved.

Multiple paragraphs no longer disappear when choosing the Paragraph command, which thankfully means you can

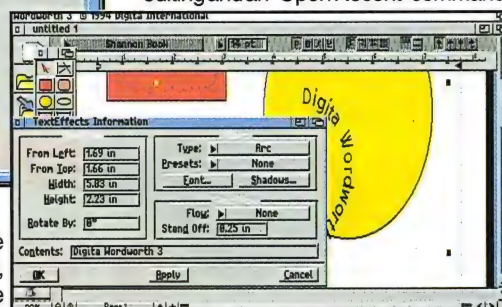
keep all you text properly.

It is now fine to load graphics from floppy and when using CrossDOS. Pictures can also be copied and pasted and moved across pages without a hitch.

Enhancements

Digita have also added a few things to this version, perhaps to make up for the earlier problems.

There is now "Drag and Drop" editing and an "Open Recent" command.



The text effects are diverse and don't cause problems anymore.

Additionally, a PC Wordperfect export filter exists.

The colour printing has been improved and disk swapping for floppy users reduced, with only five instead of seven disks now needed.

Two new help sections have also been included by Digita: Installation of Additional Fonts and, ironically, Common Problems.

Versatile

Wordworth 3.0b is the program that Wordworth 3 should have been. While there are doubtless a couple of prob-

lems that nobody has unearthed yet (if you look hard enough, you can always find something), they don't interfere with you working. For instance, selecting a font from the icon is not easy, since the sliding ruler requires you left click on it. However, if you try to left click, you have to release the left button which holds the font menu there in the first place. Hence, you guessed, it ain't possible.

The real problem with Wordworth hasn't been addressed, probably because it's too hard. The price of all the extras is a painfully slow screen update, which makes changing page size or even typing too fast (!) a problem.

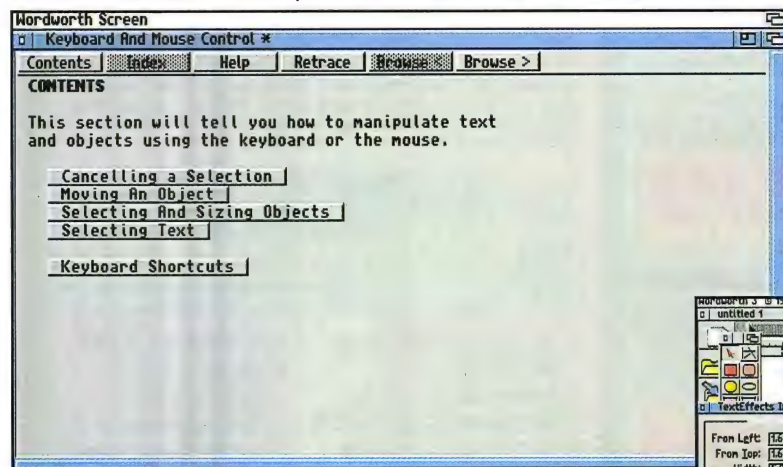
It is also important to remember that Wordworth 3 is not for the standard Amiga. It can be run from floppy and disk accessing has now been reduced, but a hard drive is really indispensable. If you want to use it properly, then lots of RAM is needed too. It does work on, say, a bare A1200, but you'll be happier and get a lot more from the program with superior, or rather additional, hardware.

With a good system, it is finally possible faithfully to take advantage of the advanced text effects and auto-correct functions that make Wordworth 3 an attractive Document Processor.

Nonsense

This version is available for free for Wordworth 3 users. Simply send Digita the original disks. For people with earlier versions of Wordworth, upgrading is a third of the full RRP. This gives a rather novel solution for those who want to buy Wordworth for the first time, given that Wordworth 2 AGA is still being produced and the combined price of Version 2 and upgrading is cheaper. Weird, eh?

It can be obtained even more cheaply by hunting around the dealers. Wordworth 3 is now worth both the time and money for those with an appropriate system. AUI

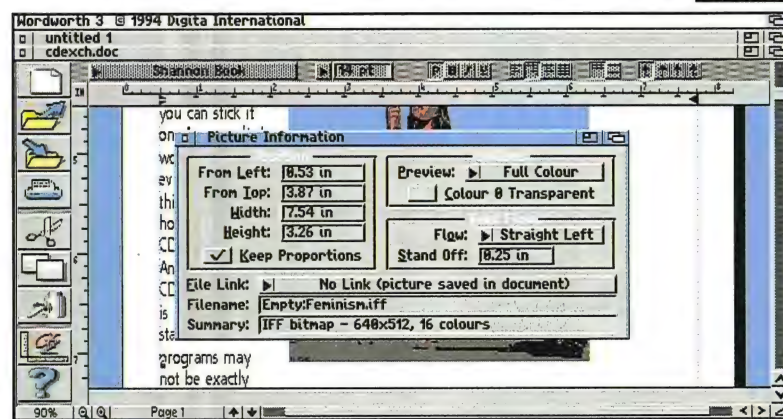


The on-line help function now works on all Amigas.

Minor fixes

I'm not going to say I'm pleased to see the following bugs fixed, as they

shouldn't really have appeared in the first place, but with a program as large



Pictures are imported from floppy easily and can be moved anywhere.

RATINGS

Wordworth 3.0b

FEATURES	92%
EASE OF USE	82%
DOCUMENTATION	82%
PERFORMANCE	95%
VALUE FOR MONEY	95%
Overall Rating 90%	

INFO

Price: £149.99 (Free to Wordworth 3 users) (Upgrade: £49.99)
Contact: Digita International Ltd
Black Horse House, Exmouth EX8 1JL
Tel: 0395 270273

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2 Many Fonts

If your typefaces are looking a little jaded and need a pick-me-up, and your backgrounds are doing just that - staying in the background, then this program may be just the tonic you've been looking for.

Graham Baldock investigates.

There's an old saying "I've never had so much fun with my clothes on, and that certainly applies in my view to the software program '2 Many Fonts' from Meriden Software. (Well, I have led a very sheltered life you know.)

If you have always wanted just that right colour fill for your typefaces or a background fill to colour your artwork, to give it just that hint of spice that can make all the difference between 'So so' and 'Bloody hell, that's a corker' - then



The Volcanic filled font is explosive.

choose from in the package - thank you very much Meriden (of course you can use your existing typefaces as well), and the ensemble is completed by an additional utilities disk with which you can get a preview of the fill you want, and a palette disk with all the colour sets



I burn with desire for this font!



Enlargement of the palm tree fill to show the detail.

you need '2 Many Fonts' straight away.

The program comes lumped together on 5 disks. The most important of which is the brushes disk which holds all the goodies. There are an incredible 205 different brush patterns to choose from and although there are inevitably a couple of dogs, the vast majority are immensely useable and I can think of few projects which I've carried out in my time which couldn't immediately be enhanced with their using. There are also two disks with ten free fonts to

your first typeface with its unique fill will be on the screen in seconds.

The fills are divided into 5 categories: gradient fills, textured fills, patterns, designs and environment maps. Although the content of the first three categories is obvious, it is the last two categories which are the most exciting.



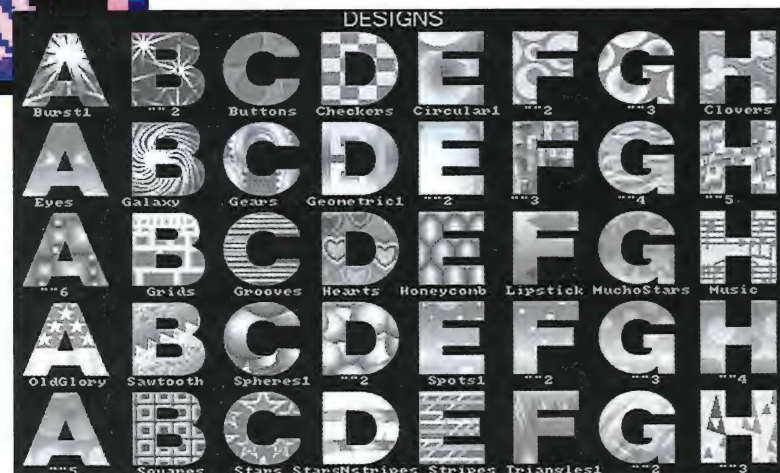
Soothing hillside scene encapsulated in the letters.



Jingoism needn't die, with the help of this patriotic font.

From stars and stripes to palm trees you have a very wide selection from which to choose. I enjoyed especially using the chrome effects which are supplied. There is straight chrome with the usual dark bottom and silvery effect top, hammered chrome and brushed chrome effects. But the stars of the show in my view are the hillside, ocean, volcanic and cityscape fills. Brilliant.

I would recommend however that you change the custom palette to the brush palette option as without it the original design doesn't really stand a chance. The fills are not particularly high res and if you don't mind a little bitmap effect when you zoom in, then there should be no problem.



The designs are very extensive.

For even more brushfills (you mean 205 isn't enough?) there is an optional package of ProFills which come on three disks and expand the options by a further staggering amount. These are fairly high resolution unlike the fills on the original disks and consist of wood, stone, bark, bumps, concrete, paper grains etc. very exciting stuff. Saves all that expensive photography chaps!!

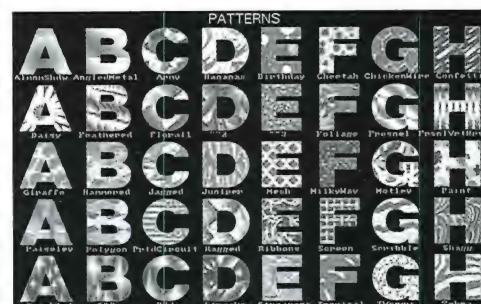
One aspect that I particularly liked is the ability of the pattern brushes to act as wallpaper... either by using the



A sort of Miami typeface, with palm trees in the font.

tile effect or by stamping down the brush in position and then stamping further copies of it on to the lateral sides. They are designed so that the match is perfect, on whichever side of the original the brush is stamped.

Compatible with any Amiga, '2 Many Fonts' will surely be a must for your software collection, especially if you enjoy working with your computer and even more if you prefer to keep your clothes on while doing it. **AUI**



The utilities disk gives you a preview of all the designs and patterns.

RATINGS

2 Many Fonts

FEATURES	90%
EASE OF USE	100%
DOCUMENTATION	85%
PERFORMANCE	90%
VALUE FOR MONEY	90%
Overall Rating 92%	

INFO

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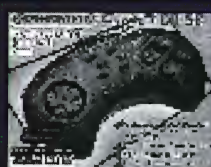
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David Taylor checks out the goodies on offer on CD Exchange Volume One.

The really good thing about CDs is that there is so much storage space available that it's impossible to compile one without putting something on that will please everyone.

This CD is no exception and has a pretty good selection of Public Domain software. Of course, there is a downside to having 600 Megs of space - that you don't have to be incessantly picky about choosing. If somethings OK, you can stick it on. As a result, I wouldn't say that everything on this, or to be honest any other CD (except

even has a front end that will allow CD 32 owners to boot it and access most of the programs.

To get the most, it is better to have the drive linked to a normal Amiga so that files can be transferred. Some

which really do show what the Amiga is capable of if you put your mind to it.

Utilities

No good CD could be complete without a round up of utilities and there are a

FREE to exchange

AmigaCD! cover CDs, of course!), is of an excellent standard. Some programs may not be exactly what you were looking for, but you can't have it all ways.

Generally speaking though, you will find several programs in each category that will please you.

Almost anyone with some form of CD drive attached to their Amiga should be able to use CD Exchange. It

of the utilities are of no use to CD 32 owners without this option and some of the Eric Schwarz anims are too large to be played directly on the CD 32.

On the whole though, this CD offers something to every CD owner, from the CDTV upwards.

Animation

Since animation has already been mentioned, it seems an appropriate place to start an analysis of the CD's contents.

In the animation drawer, there is a range of demos, which includes the classic Eric Schwarz and Tobias Richter animations. The famous "Anti-Lemmings" is there, but sadly is too large for CD 32 owners to see, without file transfer. There are, however, many that everybody can enjoy: the "Stealth Fighter" series, "Jugette", the sexy squirrel and quite a few Star Trek animations. In addition, there are some morphs done with ASDG's quality package,

This picture is called "Feminism" - no, honestly, it is.



This is one of the really well-drawn pictures that shows Amiga artists' attention to detail.

good few on this disk, all categorised and placed in appropriate drawers.

Disk utilities has, amongst the rest, the great D-Copy and SuperDuper programs. Workbench contains the very useless, but aesthetically excellent, WB Verlauf, that shades your AGA screen, along with MouseMeter and many more. The large miscellaneous utilities drawer is a treasure trove, with Angie and DOSTrace amongst my favorites.

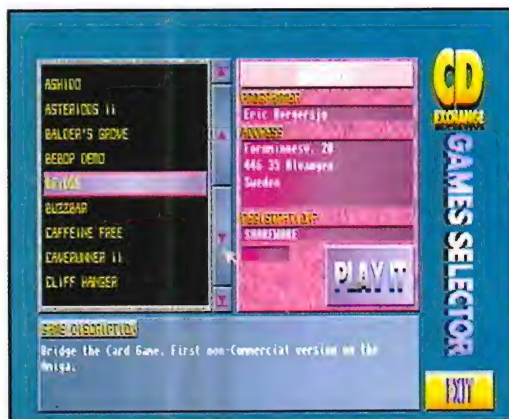
There seems to be a utility for every occasion, from databases and music players to DTP and graphics handlers.

It will take you days to flick through all the utilities and you're bound to find some gems and probably, in your opinion, some stinkers. This part of the disk is tailor-made for those who can access the CD drive from their computer.

The more astute will have noticed that many of the programs have been featured on past AUI Superdisks and you can't get better recommendation for them than that.

Music

There over 280 tunes on this disk, with little ditties at one end and 700K



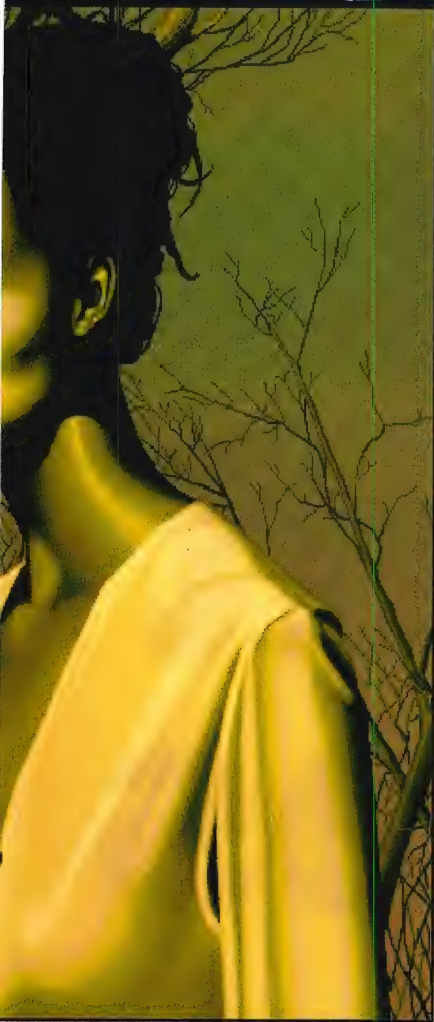
The menu for selecting a game to be played directly on the CD 32.



One of the better games, car racing fun that doesn't involve breaking the law.



The Main Menu that boots when you start the CD on the CD 32.



A still from one of the classic Schwarz animations.

masterpieces at the other. Some of my favorites are on there as are many that I hadn't heard before, although it is by no means meant to be a comprehensive collection of Amiga modules.

There is, however, an impressive collection to please the classics lover through to the hard rocker.



The Art Gallery picture section on this CD is not as extensive as the audio (as I had hoped it would be), but still contains some likable pieces and, as you can see, some horrific ones too.

Games

There are two types of games included on the CD, Public Domain and Shareware. The Public Domain games are free, whilst Shareware authors expect users to send them a donation. I wouldn't say that this is the best collection of games I've seen. Dare I say that the Amiga CD cover CDs have contained the cream, so this area may not have too much to offer CD 32 owners? Yes, I dare. There are still a few that are different - some of them good, some bad - but a lot of them have been made available on other CDs already.

None of the data has been archived, which not only means that CD 32 owners can get in on the action, but also save a bit of hassle for those transferring files. Some people are bound to have preferred it to be Iha'd as with some other CDs, so they could get more, but now is not the time to be greedy - let Amiga CD 32 owners have some fun.

With such a wealth to choose from, this CD offers great value for money for people who want a collection of PD. If you don't own any other disks yet though, don't hesitate. It's certainly cheaper than getting it all on floppy. **AUI**

RATINGS

CD Exchange Volume One

PERFORMANCE	90%
EASE OF USE	95%
VARIETY	85%
VALUE FOR MONEY	90%

Overall Rating 88%

INFO

Price: £19.99

Contact: CD Exchange
Unit D5, Hi-Tech House
10 Blackfriars Street
Norwich, Norfolk NR3 1SF
Tel: 0603 666202

D-Sam

Paul Overaa test drives an AMOS extension.

Have you ever fancied a bit more flexibility when playing sound samples in Amos programs? D-Sam can solve your problems because it's an extension library providing forty six additional sound sample oriented commands and functions. D-Sam can play back any standard IFF 8SVX sound sample and although this in itself is nothing new the library offers rather more flexibility than AMOS itself.

For a start it can cope with Fibonacci-Delta compressed samples and can either decompress samples before they are played or decompress them as they are being played. This is handy in situations where it's necessary to minimise the memory/disk space needed for samples. Both direct DMA, and processor controlled playback methods are supported with the former providing efficient playback at rates of up to 28867 Hz with almost no 680x0 processor involvement.

The other option, processor controlled sample playback, is needed to provide features like D-Sam's oversampling facilities - these allow sample rates to be effectively doubled or quadrupled to improve the audio quality of samples taken at low sampling rates. This is useful because low sampling rates can minimise sample size while oversampling on playback helps minimise any loss of quality.

Real time decompression is another instance where processor controlled playback must be used. D-Sam can also handle samples which contain Audiomaster looping tables (these are the same 'multiple loop' based samples which Audio Engineer creates).

When used properly multiple loop samples can produce dramatic savings in the overall sample sizes required for particular effects so D-Sam's support here is naturally a very welcome extra.

Sample Rates

Multiple sound samples can be loaded completely into memory or alternatively loaded and played directly from the disk upon which they are stored. The results obtainable when playing samples direct from disk is however going to vary according to your hardware.

While playing samples from hard disk it's possible to use sample rates as high as 28kHz (in stereo). Floppies are obviously slower because they transfer data at a much lower speed but if you use low-ish sample rates (about 8k is recommended) with oversampling then surprisingly good results can be obtained. This means that full sound tracks for games, demos etc., become an easily realisable proposition.

Library

The D-Sam library provides easy to use commands for loading, assigning and playing samples, loop control, infinite repeats, fading and so on along with the commands for handling the oversampling and compression facilities already mentioned. Other commands let you set disk buffer and DMA buffer size, fix the chip/fast memory characteristics used by the extension and set disk task priority.

A variety of function calls mean

you can collect information on loaded samples (name, size, default volume, stereo/mono characteristics, current play status and so on).

D-Sam is good, it works well, and will run on any Amiga running Amos 1.34 or greater and Workbench 1.3 or upwards. Installation is straightforward and the manual, though small, is perfectly adequate. The snag is that D-Sam works only with the original Amos - it DOESN'T work with Amos Pro and this obviously means that D-Sam in its present form is destined to appeal a very limited audience indeed. **AUI**

RATINGS

D-Sam

FEATURES	70%
QUALITY	80%
EASE OF USE	80%
DOCUMENTATION	70%
VALUE FOR MONEY	80%

Overall Rating 78%

INFO

Price £19.95

Contact: AZ Software
10 Linfoot Road, Tetbury, Gloucester GL8 8BX
Tel: 0666-504860



The Amiga community is lapping up talk about graphics cards, accelerators, gigabyte drives and magic boxes like the Video Toaster bringing broadcast TV graphics ever closer. But it may come as a surprise that graphics for high level professional graphics work such as TV commercials for music albums has been produced using less than a thousand pounds worth of Amiga equipment. So you really don't need all those wads of fifty pound notes you've been hoarding. Just, as in this case an A1200 with an 80MB hard drive, 6MB of RAM, DPaintIV+AGA and a Rendale 8802 genlock made it happen.

That an expanded Amiga can match the quality (and even surpass the variety) of output from big computer graphics guns like Quantel Paintboxes

somewhat more humble requirement and you can make sure they use you with your DPaint programme instead of dry hiring a Quantel Paintbox.

That's because Paintbox is too smart for some jobs. It looks like what it is. When, for example, art director Peter Brookes of QD Productions came to me because he needed to simulate a 16 bit, computer platform game for a

D-Paint goes

Wil Mobberley explains why you don't need to spend a fortune on your Amiga to use it in broadcast TV.



Graphics of this quality are possible - if you don't mind waiting a little.

or Silicon Graphics workstations borders on the miraculous, considering the relative pricing. And as an operating environment the Amiga is far more friendly.

However, it's obviously true you get something for your money when you spend £60 000 on one of those costly rival systems. Watch a Silicon Graphics workstation rendering... the speed is scary.

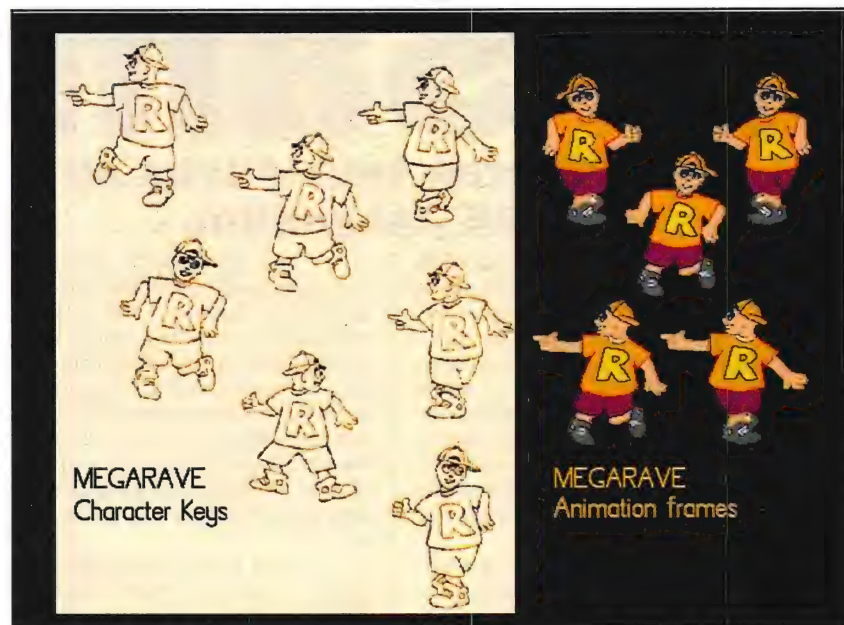
The chances are what you have on your desk isn't anything like the row upon row of A4000s used to do the "Babylon 5" graphics, but so what? There may well arrive occasions when someone will come to you with a

record commercial, Paintbox was the wrong tool. If you want to simulate charcoal sticks you don't use watercolours.

Peter Brookes needed 4 seconds of animation based on the cover of an album called "The Megarave". A character jumps around on moving platforms before spinning through the air and landing. Then he dances on the spot.

Matte runs were also needed (identical animation in white silhouette so that the logo and any graphics could be overlaid onto live action.)

I suggested DPaint because that is the package which may well



The original scan with the key character sheet.

have been used to produce the very game graphics that Peter Brookes wanted to emulate. I also knew that if I kept the background a single colour and then protected it with a stencil, all I'd have to do would be to select white with my right mouse button, clear all the animation frames and bang - instant mattes.

One Sceen

Our biggest concern was moving backgrounds around. It's easy to move a background north, east, south or west but things start to get hairy if you want to move diagonally or, even worse, in a curve. If you want characters moving around but still regist-



ered to that background as well, then it becomes a real headache. In a perfect world you'd be able to pick the whole thing up as an animbrush and move it, but I've yet to see an Amiga with that kind of chip RAM - and what of characters moving on and off the edges of this imaginary animbrush (and onto the next chunk of background you'd

with a matte run - moved across the logo but remained in register with the platform level.

We wanted to imitate the slightly degraded picture you get when you go via a modulator to a domestic TV. Live video was added, the screen splitting in half to reveal it and I provided two additional mattes.

Pro



The virtual background used with spare page merging.

have to butt against it?) To achieve all that you'd have to effectively program a real computer game.

It was decided to confine movements to one screen and make any global shifts after the logo was in place. Rather than assemble the elements onto the finished background, the Amiga animation was created as three levels. To accomplish the parallax effect, the background was a repeating texture and shifted up and down in the edit. The middle level (the platform activity) with its own matte run, was also moved about after the logo had been added while the top level, the character animation - also

Since we wanted to imitate the slightly degraded picture you get when you go via a modulator to a domestic TV, I had no worries about output. If the results had looked too RGB-ish, it would have been necessary to tweak the image. All I needed was a £120 Rendale 8802 genlock I'd picked up in a sale and which performed almost too well!

While testing it I visually adjusted my Amiga monitor so that it matched the one attached to the Betacam machine. This was so that the colours could be checked on my monitor without my having to hire the VTR facilities.

Tricks

It's a useful feature of DPaint that the colours in a palette can be defined by HSV and RGB because there are one or two tricks you can do. I deliberately limited my saturation because I didn't want colours to go "illegal". If they rise above a certain level, the PAL+TV system reveals its shortcomings. Colours smear across the screen or go speckly. So I aim to keep my colour saturation below about 75% of the Amiga's available range.

**In a perfect world
you'd be able to pick
the whole thing up as
an animbrush**

The final frame still had to be very close to the album illustration so I set up my palette to match as well as I could, cheating a little with the outline colour of the platforms to give them more definition. Then I set about recreating the various shapes which meant a lot of cutting and pasting and saving the elements as brushes. I played safe by working in maximum overscan, interlace mode because it was going to video.

For the background level, I built the basic design, cutting it out as a brush and selecting Perspective/fill screen. Then I set up a sequence of frames and used the fill tool to spot-highlight elements in the design to give an electrical effect.

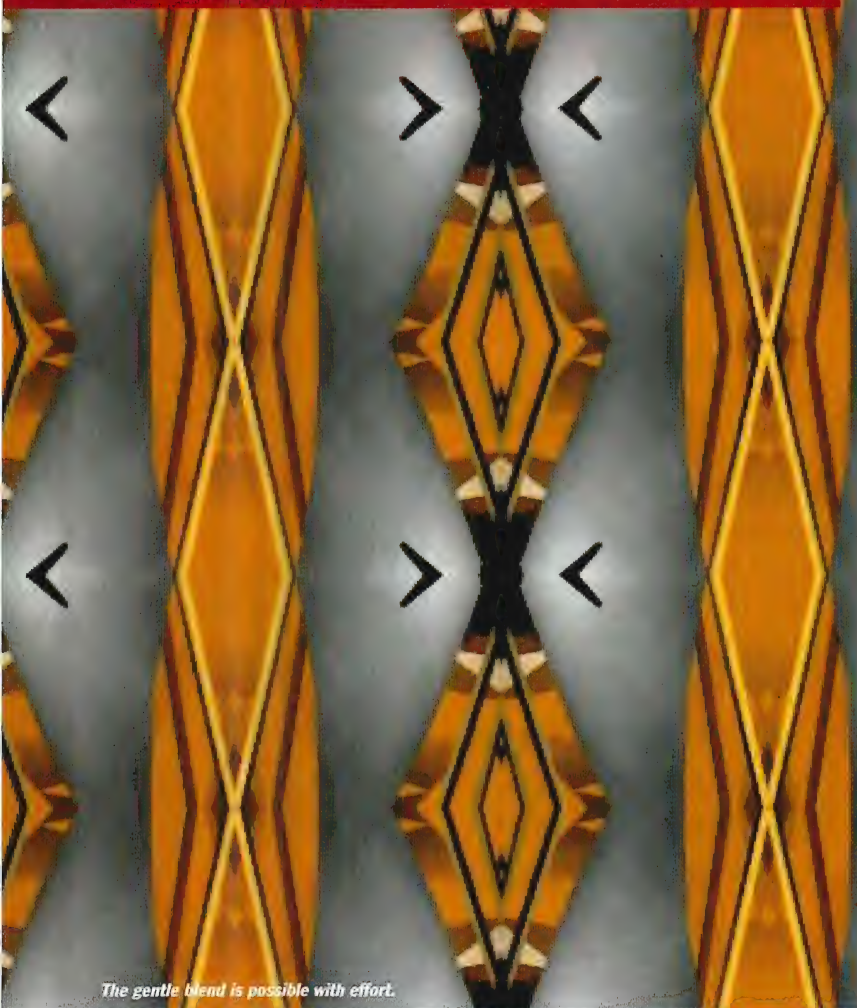
DigiView

We hired a traditional animator, Clive Dawson, to produce the key positions for the character animations on paper, which were digitised using DigiView. Then I cleaned the keys up and coloured them. I made an animbrush of the cycle dance but the other keys were stamped down individually.

To choreograph all the elements together I animated a blob of colour representing the character and timed where the platforms should be at a given moment. Pasting the character down was done by reading the coordinates of each blob. Having arranged the brush handle on the character to relate to where the blob's position, it was a simple matter to stamp the character down - except



*The sprite movement from the
Megaverse advertisement.*



The gentle blend is possible with effort.

when I forgot that you can't paint underneath the tool block. Aaaaargh!!!

Virtual Backgrounds

Soon the move requester had the platforms moving as I wanted them, at this point filled with flat colours. This was because I wanted to use a technique without which the whole thing might have looked a bit bland. I call it "virtual backgrounds".

To do this trick you have to get to know DPaint's stencilling and spare page techniques. Inside each of the circles and platforms we wanted a larger version of the background. This could have been done by using the fill tool with a suitable brush when we made each element but then they would have just looked like they had a pattern on them. We wanted to give the impression of a window into another dimension.

To do this trick you have to get to know DPaint's stencilling and spare page techniques.

I tried this method first. I created the new image on the spare page. The I pressed "J" to get back to the

animation, to take the animated shape and select its middle colour as bg colour. Merging the spare page into the back, (selecting "All frames") puts a virtual background into that area.

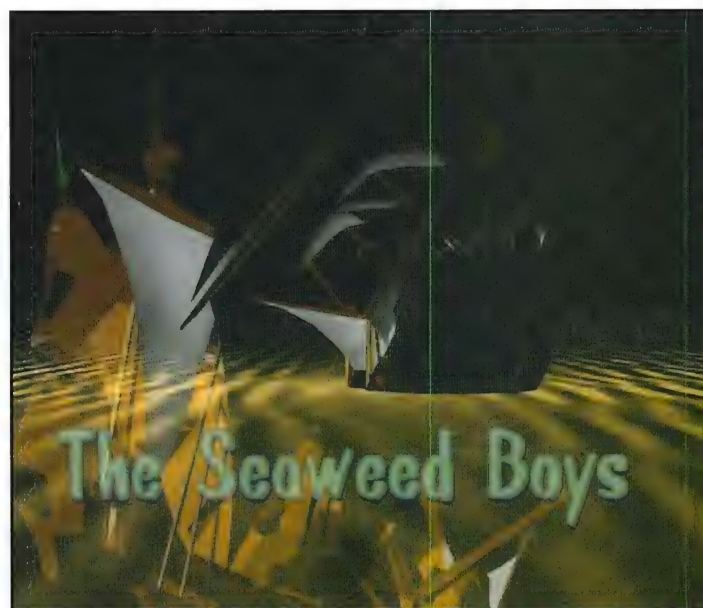
On Megarave, however, we wanted to have the virtual backgrounds moving as well so I used a different technique.

First I cut out a massive brush from the spare page background. Then I switched to the main animation and made a stencil, locking out all colours except the one I wanted to become a window. I then set the move requester to stamp down the brush as the window passed over it, all the time animating independently. It's simple but effective.

Since DPaint saves the differences between each frame and decompresses them at playback, I didn't trust it to lay the animation to tape in real time. One frame out with my matte runs, and they would have been a waste of time so I opted to use Frameline Productions' EOS single frame controller. That way I'd know that everything would match.

All that remained was to hand over the tape and wait for the final edit. **AUI**

HAM8 - Stay Up Late



When DPaint IV+AGA was released in the Autumn of 1992, eager eyes gaped at what for many of them was their first Ham8 picture; the Electronic Arts logo in the clouds. Yes, HAM8 was impressive but the thrill rapidly turned to alarm. It was only necessary to watch that tool bar creeping down the screen after pressing F10 to know that Ham8 on DPaint was too slow to be of any real use and as for quality, well, even those with an inordinate degree of patience couldn't deny the dreaded fringing wherever text was pasted down.

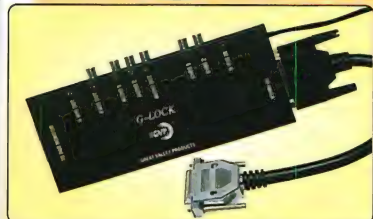
I haven't bothered with the HAM8 side of the program since. It might just as well not exist.

What I do love about DPaint IV AGA, however, is the 256 colour mode. That really is enough for glorious, graduated colour fills. Just be cunning when you set up your palette. Try setting up two identical halves to your palette and then drop the value levels of one half (a bit like half brite mode.) With this carefully concocted palette, only paint with one half and let the computer decide when to use the others. You'll find translucency a dream and anti-aliasing really does look very special.

Megarave material reproduced by kind permission of Quick on the Draw Productions.

Wil Mobberley is a freelance computer animator and Paintbox operator. Based in London, his Amiga credits include the Guinness CD of Records, various record commercials and a football game simulation for the Middle East.

G-LOCK VIDEO GENLOCK FOR ALL AMIGAS



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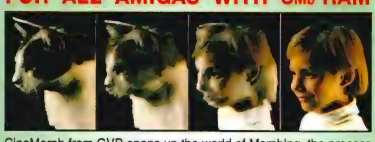
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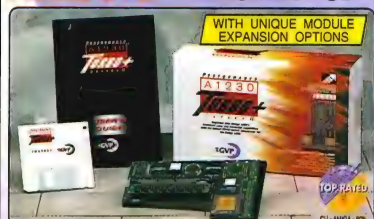
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ADI ENGLISH

ADI MATHS

GCSE Level

Martin Witton finds the popular young kids' learning character venturing perhaps riskily up to the "picky" teenage level.

WOW!



Remember ADI - the cosmic character who helps you learn? Here he is again, but this time for older children undertaking the two year GCSE course. From the makers of Fun School, it may seem surprising that the character is considered sophisticated enough for teenagers, but who said learning can't be fun for older kids?

ADI English is divided into two disks for 14 - 15 year olds and 15 - 16 year olds. The 14 - 15 program has been written for pupils in the fourth year of their secondary education, and consists of four chapters, broken down into various sub-chapters, which explore the theme of communication. The other program for year 11 pupils (15 - 16 year olds) revises Key Stage 4 of the National Curriculum and is set up as a police investigation through five chapters, each one utilising a variety of techniques.

Both programs provide lots of information for students and those who have developed considerable computer skills such as presenting projects using a word processing package and graphics, will find ADI enhances potential through the applications. No short cuts are allowed and even switching off the system has to be carried out through the exit icon. Students going straight for the 'off' button will lose points they may have accumulated and saved, which they need to progress. As only one program from the list is available until a number of points is reached, there is undoubtedly an incentive for exiting properly!

The manual is well written in an appropriate style for teenagers, not talking down but expecting an intelligent approach to the subjects. Sensibly the 'F' key functions are outlined on the



A quick game of Battleships to escape the learning.

back fly of the manual for quick reference.

Environment disks are loaded first which gives access to animated sequences in an encyclopaedia format. They can be referred to while the student is working through an application for comprehensive information relevant to the subject in hand.

As you would expect, ADI English covers spelling and punctuation, the structure of sentences and English comprehension. (Pause while the Editor of *AUI* gives impromptu lecture on apostrophes and refers you to Casson's Using Words! Also check that I haven't put "it's for "its" or "loose" for "lose" and horror, find I have! Must use this program for myself!)

More importantly, the benefit over traditional teaching methods is the interspersing of poetry, prose and drama with non-literary and media texts with which adolescents usually identify.

ADI Maths uses the same format and division though the disk arrangement as English and covers Geometry (including Analytical Geometry), decimals, fractions and rotas, equations, probability and calculating.

This set of programs covered is even broader than the English set, incorporating science and technology as well as general subjects. Report screens, a personal diary, notebook and calculator are standard together with the nine games for reward. (Games they may be, but no less taxing).

ADI offers helpful and user friendly advice, which, when tackling complicated Mathematics queries, is excellent and saves both teacher and pupil time in not having to continually 'go and ask' when encountering difficulties. Allowing pupils to go at their own pace and seek 'help' as many times as necessary, saves face too for the reluctant or hesitant student not wishing to be shown up in class.

The programs could be said to be truly interactive and certainly provide a stimulating way to learn, or more importantly to revise what has been covered before, but not necessarily

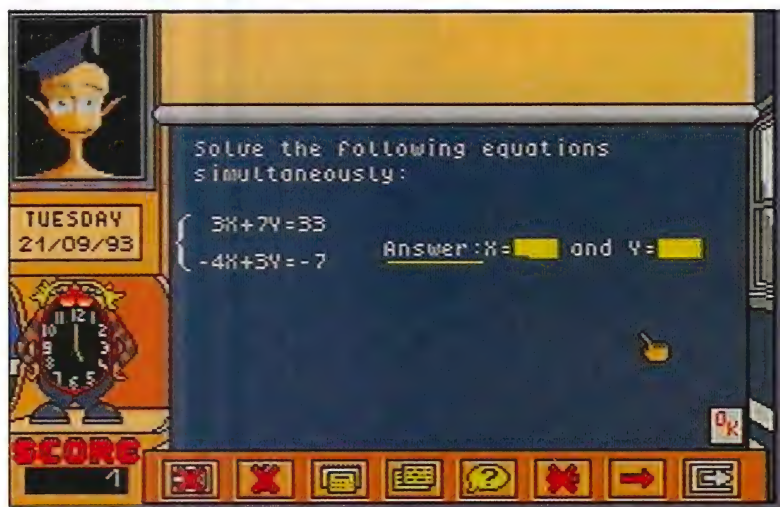
absorbed, in preparation for the GCSE exams.

Conclusion

With literally hundreds of activities with each application, the programs represent great value for money and as a supplementary teaching tool, offer practice variety and reward through both the points system and prizes of computer games awarded as progress is made.

The advantages of ADI are that they form part of a progressive set of learning material, from Fun School 3 - 4 years, ADI Junior right up to GCSE French, English or Maths and the student can benefit from the familiarity of knowing how it works.

But with all the ingredients, which have been carefully developed using, say Europress Software, research from educational psychologists and teachers, for a successful package, it remains to be seen if ADI holds the right kind of appeal for picky teenagers. They might just feel turned off at using a character that is popular with kids quite a bit younger than they are even if they themselves liked it a few years before. Or even BECAUSE they liked it themselves then. If they can be persuaded to use this program, they'll almost certainly benefit from it but perhaps a different character may have to be developed for the GCSE level age group. *AUI*



Simultaneous what? Equations aren't my thing.

RATINGS

ADI English
ADI Maths
7 out of 10

INFO

Price: £34.99

Contact:

Europress Software Limited

Europa House

Adlington Park

Macclesfield

Cheshire SK10 4NP

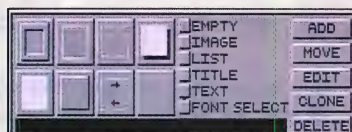
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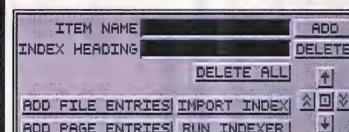
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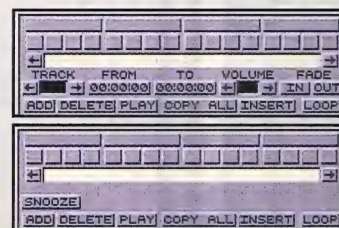
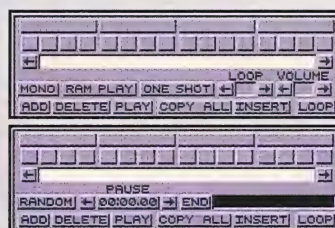
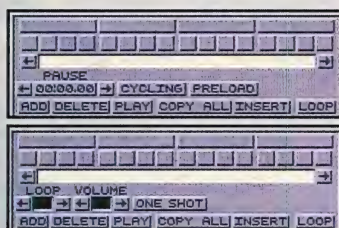


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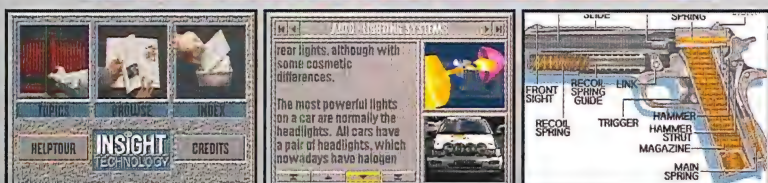


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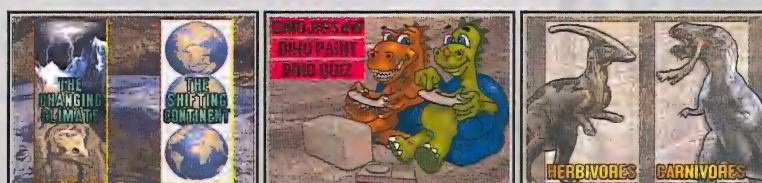


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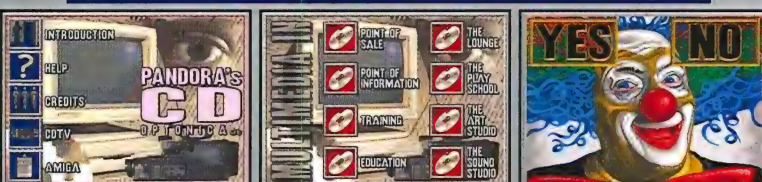
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INSIGHT:DINOSAURS is the second title in the INSIGHT series, a lavishly produced title rich in multimedia. You can be assured INSIGHT:Dinosaurs will be visually stunning and technically correct as the title is being produced in association with the British Natural History Museum, one of the worlds foremost centres of excellence in the field of paleontology. Also includes quizzes, puzzles and dinosaur paintbox.

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This little rascal got blamed for killing off the dinos at one time.

Martin Witton travels back in time to enjoy a Spielbergian thrill from a naturally historical CD.

65 Million Years Ago

(Just wait a moment please)

6 5 million years ago...Just wait a moment please. So, amusingly, starts the new Optonica dinosaurs CD. OK, so everyone loves dinosaurs..But why? And do they? It's odd that one of the least pleasant beings ever to inhabit this earth is assumed to be universally popular. It wasn't fun to sit in that car in Jurassic Park and have the nasty great beast staring in, was it? Yet Spielberg's epic drew the crowds into the warm and comfortable dark to be nicely terrified - and not just teenagers anxious for a sexy horror thrill.

Optonica must have thought that the supposed attraction the dinosaurs have for the modern world was a strong one for they have spent a great deal of money and time coming up with what one might describe as the "ultimate" in dinosaurian publishing. (That is if the Editor didn't hate the word "ultimate" and in any case more is being discovered about the biggies of prehistory all the time.)

Optonica have gone to a lot of trouble not just to provide an entertaining coverage of everything dinosaur but to make it absolutely accurate too. To do this they have gained the prestig-



There's even time for fun amongst all the serious history, or prehistory.

ious collaboration of the Natural History Museum - and more prestigious or knowledgeable than that they don't come.

but fascinating enlightenments on these mysterious beasts that probably ruled the earth for millions of years - far more than mankind has.

It has photos, drawings, text, sound, speech even some bits of video-style material thrown in. Truly multimedia. It even has, for the younger user, a paint program that lets you colour in dinosaur scenes. The kids who used it with me loved it and were only sad that the stunningly coloured and highly dramatic results of their "artistic dinosaur takents" couldn't be saved. (It's time they brought out a re-writable CD, if only to let ME keep the picture I created and that is now gone forever - like the dinosaur it showed, pillar-box red in tooth and claw.)

For the young ones too there are also a number of simple - and not so simple if they choose the "hard" option - games such as filling in the squares of a picture - of a dinosaur, of course.

For me the most interesting part was the ability to move both through the millions of years and all the relevant pieces of information and turn up the odd item with which you would love to test your friends at a quiz.

Not actually a dinosaur, we discovered.

If the majority of people were shown a picture of a plesiosaur, and asked to identify it, they would probably say that it was a dinosaur. This is an easy mistake to make as, like dinosaurs, plesiosaurs were reptiles that lived in the Mesozoic Era. However, plesiosaurs are not



INDEX GLOSS

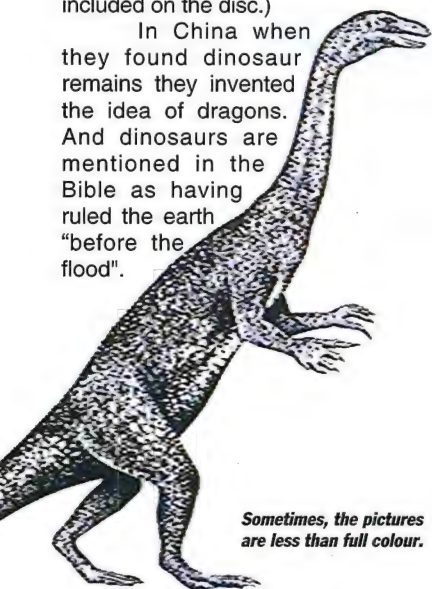




Big, sharp, pointy teeth. Ideal for ripping flesh. Lovely.

(There is - of course - a dinosaur quiz included on the disc.)

In China when they found dinosaur remains they invented the idea of dragons. And dinosaurs are mentioned in the Bible as having ruled the earth "before the flood".



Sometimes, the pictures are less than full colour.

I didn't know that the first real mention of dinosaur in natural history came about 1824 but the word dinosaur wasn't coined until 20 or so years later.

Did you know that the first mention was of a megalosaurus - which appeared to be a category into which any discovery could be thrown? And the terrible tyrannosaurus has merely been found eleven times and mostly until the last ten years only in very small bits. By the way the poor unfortunate had such short arms that he - or she - couldn't even reach its mouth. What on earth was the use of them?

That's about the only thing on dinosaurs that this Optonica disc doesn't tell you. They've gone into the whole subject in a lively and extremely informative way and the list of credits goes on for minutes with all the people who have taken part - a list as long as a feature movie.

The disc is for both Amiga CD

AUI TEST DRIVE

CDTV

On the CDTV, the graphics are obviously less impressive than on the CD 34, but nonetheless, the information at your disposal is visually well represented.

The controls are simple via the remote control. Move the flashing box around onto the subject or area you are interested in and press the A button. The B button backtracks.

It's easy to use and probably ideal for the CDTV audience. It does lack the impressiveness that the CD 32's power allows and may not captivate the young ones as much as running it on the superior machine would. But CDTV compatible it is.

32 and also CDTV, which is nice because the poor CDTV owners can't be happy with the way they have been neglected. Good on you, Optonica.

Conclusion

There is no doubt that if you want to know about dinosaurs the British Natural History Museum is place to go. Short of a visit or perhaps in addition to a trip to Kensington this disc will not only give you all you would want to know but make you want to come back to it again and again to find out more.

The only slight fault is the scarcity of video material which would have made it more exciting but I suppose that Optonica would say, with some justification, there's not a lot of original video material of dinosaurs about.

"Dinosaurs" would make an ideal, lighthearted present for anyone, especially of early school age because of all the variety there is and the ease of its interface. The use too of very

large windows to show the pictures also makes it impressive.

As they used to say about presents - hours and hours of fun; the best kind of education you can get. If you like dinosaurs that is. And who doesn't? AUI

RATINGS

Dinosaurs

FEATURES	90%
EASE OF USE	92%
PERFORMANCE	95%
VALUE FOR MONEY	84%

Overall Rating 88%

INFO

Price: £39.95

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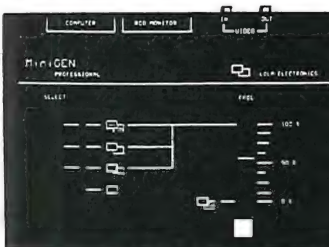
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Making it on Video!

The AUI Guide

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YOU can make it on Video!

There are many things that the Amiga does exceptionally well but there are two in particular: games and video production. As the Amiga is becoming recognised as a video tool a great deal more now than it was a few years ago, here is the AUI Guide to Video Production. Action! (Cue the AUI team led by Gary Fenton)

The Amiga is still widely identified as a games machine in the UK, while in Germany, Scandinavia, and especially the USA, the Amiga is seen as a very accessible tool for the growing field of video.

In fact, the Amiga would probably not exist at all in the States if it weren't for its acknowledged success in the video market. (We'd better thank NewTek and its Video Toaster for that ad now we even have a PAL version of LightWave! See AUI August)

The one thing that has always been true of the Amiga is that it's a very cheap way to get into video production. Don't be intimidated by the use of the term "video production". You could well be imagining a cast of actors, a camera crew, and a bearded director sitting on the end of a mechanical arm floating above a decorated set. Sure, that's a video production and so too is you sitting down in front of your TV with your Amiga, a video recorder, and possibly a camcorder.

How do you think Spielberg and other famous directors began their careers? No, maybe not with an Amiga but they certainly started off producing small films with almost non-existent budgets. Even if you don't see video and film production as a career for you there is a lot of satisfaction to be gained from a small Amiga based video system.

No matter how much or little you have to spend on video production, we'll be looking at many different hardware and software packages that may tempt you into becoming a new recruit to the video bandwagon. If you aren't sure of some of the terminology used in this AUI Special then please take a look at the Easy Access page.

There are several products which can turn the Amiga into an automated video editing system. A piece of hardware interfaces the Amiga with the source device (like a camcorder) and the recording device (a VCR) which are both appropriately controlled by the Amiga using special editing software.

Simple infrared controlling systems are never too accurate when it comes to editing. Ensuring both the playing and recording machines have a LANC or 5 pin edit socket will give more accurate editing. For perfect edits, on top of that, the playing machine should utilise some kind of timecode, like RCTC or VITC.

We review two editing systems from Scala and Camlink, but there are others on the market that we sadly don't have space to review this month. KRP Video Services (Glasgow 041 762 2510) specialises in a

whole range of editing controllers for enthusiasts and professionals, and so too do Syntronix (Derby, 0332 298422/33).

We would have liked to recommend VideoPilot (a particularly good editor), but it ceased production several months ago until further notice. We'll let you know when (or if) it becomes available again.

Have a look at the diagrams and see just how little equipment you need to get started producing your first video. Like other things in life there's an art to doing it properly and the best way to learn is to have hands on experience. Think of an idea, sketch it out,

and have a go! You could start by getting the right tone on words like "Action!" but don't shout too loud or you'll alarm the neighbours!

Cut!

Print it!

Right, Gary, let's get into the next set up.

KEY TO GENLOCK ICONS:



RGB output to feed an RGB monitor.



Supports YC video.



Cross fading.



Fade to black.



Software control.



Selectable key colour.

Video picture balancing.

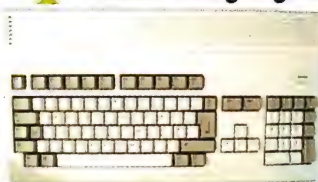
Most basic setup to record A600/1200 graphics onto video using a composite connection.



To RGB monitor



Basic connections for adding graphics to videos using a genlock.



Y-C-Genlock

£349 HiQ Ltd



Fancy a low-priced genlock with YC socketry faders, and heaps of features? Then this little box from German hardware producers, Electronic-Design, may be just what you've been looking for.

The Y-C-Genlock has been available for a few years now and I didn't know what I had been missing out on until I was given one for review. It's a very popular genlock in Germany and I'm surprised that it never caught on in the same way over here in the UK.

Before I mumble on about the technical specifications I must comment on the design which just happens to match the colour of the A1200. If it weren't for the grooves cut along each side of the case it would be a very bland box. There's a splash of red on the knobs (or "dials" if you laugh every time you read the word "knob". Tsk, kids!) which are fixed to the front of genlock.

Connections are made at the rear of the box and include YC and composite in and out, RGB out, and monochrome out. The latter socket is for connecting to a digitiser, such as Digi-View, which requires separated red, green and blue inputs. The Y-C-Genlock does this automatically for you if you happen to still be using Digi-View.

Most genlocks have an RGB pass-through socket which does exactly that; pass the RGB picture from your Amiga through the genlock as if the genlock was never there. This genlock, however, has other ideas and actually lets you mix and

fade your video signals while viewing the RGB output on your monitor! Although not many VCRs will record RGB signals you can still see what's being recorded on your VCR without the need for an extra monitor.

I've had the genlock plugged in to my system for a few days now

with just a little bit of imagination. The knob titled Mode fades in and out Amiga graphics keyed on top of live video, while another knob crossfades from Amiga to video. The three other controls are for contrast, brightness, and colour saturation. These affect both Amiga and video pictures, so

turning up the brightness makes both the Amiga and video picture brighter. Using the brightness and contrast controls you can

slightly brighter at a 90% mix before dropping off to its proper brightness level. As I said, you can't really complain about small things like this considering it's price and all the other great features the genlock provides.

It also has an inverter switch which makes the Amiga's key colour visible and all the other colours become keyed (hence inverted). On the video tricks front, it will covert a YC input to RGB so you can view high quality YC video through your TV using SCART if you don't have a YC input on your TV. The manual surprisingly claims it will also decode copy protection on prerecorded videos, although I haven't tried this myself.



using just one monitor connected via the genlock's RGB output. I can reap the benefits of a nice sharp RGB display (for word processing and drawing) without having to swap cables or use a second monitor when I want to use the genlock for mixing and keying. Using the RGB output you can actually appreciate the genlock's excellent keying quality to the full. Superimposing Amiga graphics on top of live video gave very believable results which looked almost as good through the genlock's YC output.

The five knobs on the face of the genlock can be made good use of

fade to black or simulate a flash of bright light.

The review model I tested had a strange effect when I added about 10% of the live video source to Amiga graphics. The video image became inverted so dark areas were bright and bright areas were dark. This may be a fault with the genlock but I like it and it's dead useful for special effects! In normal use this "fault" is unnoticeable.

Quality of fading can be considered as good bearing in mind the price of the genlock. I found while fading in Amiga captions over a video source the Amiga graphics became

Conclusion

The Y-C-Genlock is ideal for people who have burnt a hole in their pocket after buying a YC camcorder and need a genlock which gives plenty of features and those important hardware faders. You can't go far wrong if you buy this friendly little box.

MiniGEN

£49.99 Lola

Getting into video? This is just about the best place you can start with an extremely affordable genlock which, by most means, definitely won't break the bank.

Many years ago when Workbench 1.3 was the latest thing, there were only a few ways to add graphics to your home video. Most of the options available at the time were expensive or crude (using the Commodore TV modulator!) until some excitement arose concerning a new genlock which sold for a ground breaking price of around £100. This, of course, was the MiniGEN.

The original model got very hot after long use and picture quality was not particularly good. However, the latest revision of the MiniGEN has newer components, doesn't get hot, and gives what amounts for a very good picture for the more

than a reasonable asking price.

It fits directly into the RGB port on the back of all Amigas and is shaped just like the old A520 TV modulators. There's a composite input and one composite output and that's it! No RGB pass through and no fancy fades. What it does have is a three position toggle switch which cuts between Amiga graphics only, video only, and Amiga graphics keyed over the video picture. Flicking the switch between all three modes gives a clean cut which, I'm happy to say, doesn't upset the video signal that comes out of the genlock. So while you can't mix, you can cut instead.

Conclusion

Keeping in mind the tempting price, the MiniGEN offers pretty good picture quality which is certainly sufficient quality to use with all domestic video equipment. This is by far the cheapest genlock on the market but thankfully doesn't suffer from cheap, scurvy results as you might expect.



MiniGEN Professional

£149.99 Lola

MiniPRO is a heavy duty Amiga to genlock cable which is a generous 90cm in length.

In performance, you get an averagely good picture - nothing to shout about, but admirable for the unit's price tag. The slider is very easy (perhaps too easy) to move and doesn't require more than a tap with your little finger. Very smooth fades are the result although I noticed an operational "quirk" with the review model. When the genlock is in keying mode and I've just faded out the graphics I can still see the graphics faintly ghosting over the background. However, Lola assured me that they have since rectified this problem and it's now glitch free.

Conclusion

The MiniPRO certainly doesn't get any marks for aesthetics, but it's the features you're paying for and not its looks. Its average performance is nicely balanced by the inexpensive price tag and it ties in nicely when used as part of a budget VHS based system.

If you like the sound of a simple, effective and affordable genlock then check out MiniGEN's big brother featuring fade controls.

The MiniPRO is a desktop genlock with all the bits and pieces you'd expect from a full spec genlock. It's single sliding fader mixes in and out Amiga graphics keyed over the

background video source and cross fades from Amiga only to background only and vice versa.

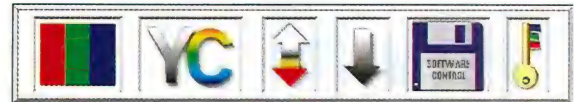
Which mode you're in depends on which of the three buttons you've pressed. The currently selected mode is indicated by a red LED glowing next to the button you last pressed. The RGB pass through connector on the back of the MiniPRO can be hooked

up to your RGB monitor which gives a sharp RGB display from your Amiga, regardless of which mode the genlock is in.

The two composite in and out connectors are of the BNC type (preferred by professionals) and the correct cables required can be supplied by Lola if you don't have any yourself. The only cable that comes with the

VideoCentre

£495 G2 Systems



Within the region of 1000 units sold worldwide, G2's VC1 is still going strong. Aimed towards top end home users, could this be the genlock for you?

The design may be over five years old but it certainly doesn't look its age when placed next to the competition. It has all the important features you could want including socketry for YC and composite video, a cross fader and fade to black, in fact, it has everything the GeneSys has plus a "key out" socket for vision mixers.

So why the price difference between the VC1 and the GeneSys? Well, the GeneSys is a new product with new components whereas the VC1 is older and has actually been

reduced in price from the original £645. As well as being cheaper than the GeneSys, the VC1 can be controlled directly by the Amiga without the need for extra hardware (just a cable for £18). Scala MM300 can control the VC1 which means the cuts and fades will be right on cue every take.

In performance, the VC1 gives very smooth cross fades and evenly fades to black - except when Amiga graphics are keyed on top of the background video, the graphics fade to black before the video begins to fade to black. This is perhaps a problem for some potential users, but this operational "quirk" doesn't cause any problems when fading to black in the other modes.

Conclusion

Picture and keying quality are very good and, although not as admirable as the GeneSys, you can see the VC1 still stands out from the cheaper genlocks on the market.

Conclusion

This product is probably far too good (and expensive) to be used in amateur situations. Obviously this unit will be of great interest to professionals who expect nothing but the best in terms of quality and operation. Incidentally, VC1 owners can upgrade to the GeneSys.

GeneSys

£795 G2 Systems



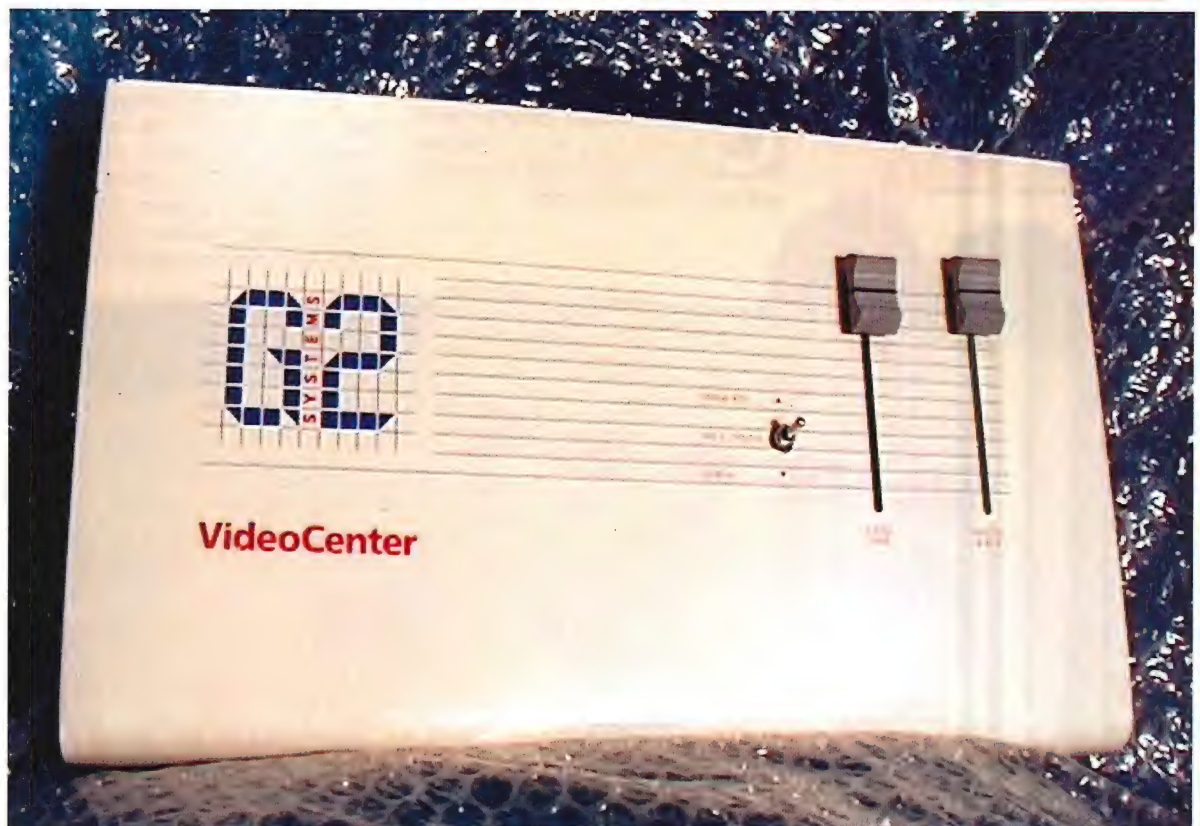
G2 have made a reputable name for themselves in the genlock market with a range of high quality products. The GeneSys is their latest addition aimed strictly at more demanding professional users.

After a brief trial with the GeneSys' faders you'll be pretty dim not to notice that this product has quality painted all over it (not literally I may add!). With both YC and composite video handling, RGB pass through, and two faders, it has most of the features anyone would expect from such a device.

Sure, other bits could have been added like contrast and colour controls but all the emphasis has been put on the quality of the faders, keyer and video signal. A lot of the expensive components from G2's broadcast genlock, the VC3, have been used in the GeneSys' construction which clearly marks it as a professional product for studio and even broadcast use.

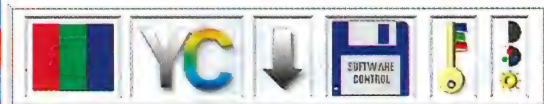
Operation is very straight forward with a three way toggle switch for Amiga key, video only, and Amiga only modes. One of the sliders fades the Amiga in and out and cross fades while the second slider fades whatever is being displayed to black. Fades are clean, fluid and uniform which again highlights the quality of the unit's components.

A remote socket on the back of the genlock can be connected to an optional piece of hardware which gives other equipment total control of the GeneSys - including the Amiga and Scala MM300. DIP switches, also on the back, allow you to toggle between one of 16 colours which is used to nominate the key colour for overlaying Amiga graphics on top of the background video.



G-Lock

£299 Silica



GVP are well known for packing in as many features as they can with most of their Amiga products. The G-Lock is no exception.

What's surprising about G-Lock is that it has absolutely no buttons, sliders, or knobs of any kind. The mysterious black box is totally software dependant which may put some people off but there are a lot of positive things to say about software control.

Firstly, you'll be pleased to hear that G-Lock provides two composite and one YC input with an additional two phono inputs for audio. Sadly, the audio output is only mono but the software allows you to mix the inputs and alter the bass and treble.

The RGB output socket can carry the Amiga display unaffected to your monitor, and the G-Lock can be wired to provide professional YUV output!

The control software multitasks and hotkeys can be defined so the G-Lock can be controlled while you're using another software package. As well as the brightness, contrast, colour and saturation controls, four other menus provide control of the genlock's video processor which can provide some very interesting colour effects. Fading to black is possible by reducing the brightness levels but sometimes causes lines to appear on the screen.

Fading in or out of Amiga graphics and cross fading is not possible which is the genlock's biggest shortcoming.

Keying of Amiga graphics is very well supported by the software which allows key colours to be completely user-definable. Bitmap keying is another option which produces peculiar results. The software has an ARExx port so lots of scripts and effects can be written if you know how to use ARExx, or alternatively Scala MM300 provides excellent direct control over the genlock.

Conclusion

Although G-Lock is bulging with software features, I feel it's let some users down with the total lack of cross fading. However, the picture quality is impressive for the price (it's been used on an ITV quiz show!) and the whole package in general represents real value for money.

Rendale 8802 FMC

£178.99 Marcam



Ghis Marcam genlock is a well known product and could be a very attractive buy if you want to start to get into the video scene.

The 8802 used to be sold with a piece of software enabling you to fade in and out Amiga graphics. That software is now long gone and has been replaced with a neat little box called the Fade Module Controller (or something like that!), hence the name 8802 FMC.

The whole package comes as two units, the genlock itself which connects to the Amiga via a 15cm cable, and the FMC which in turn is attached to the genlock via a 50cm ribbon cable. The idea of having two parts may sound messy but I've placed

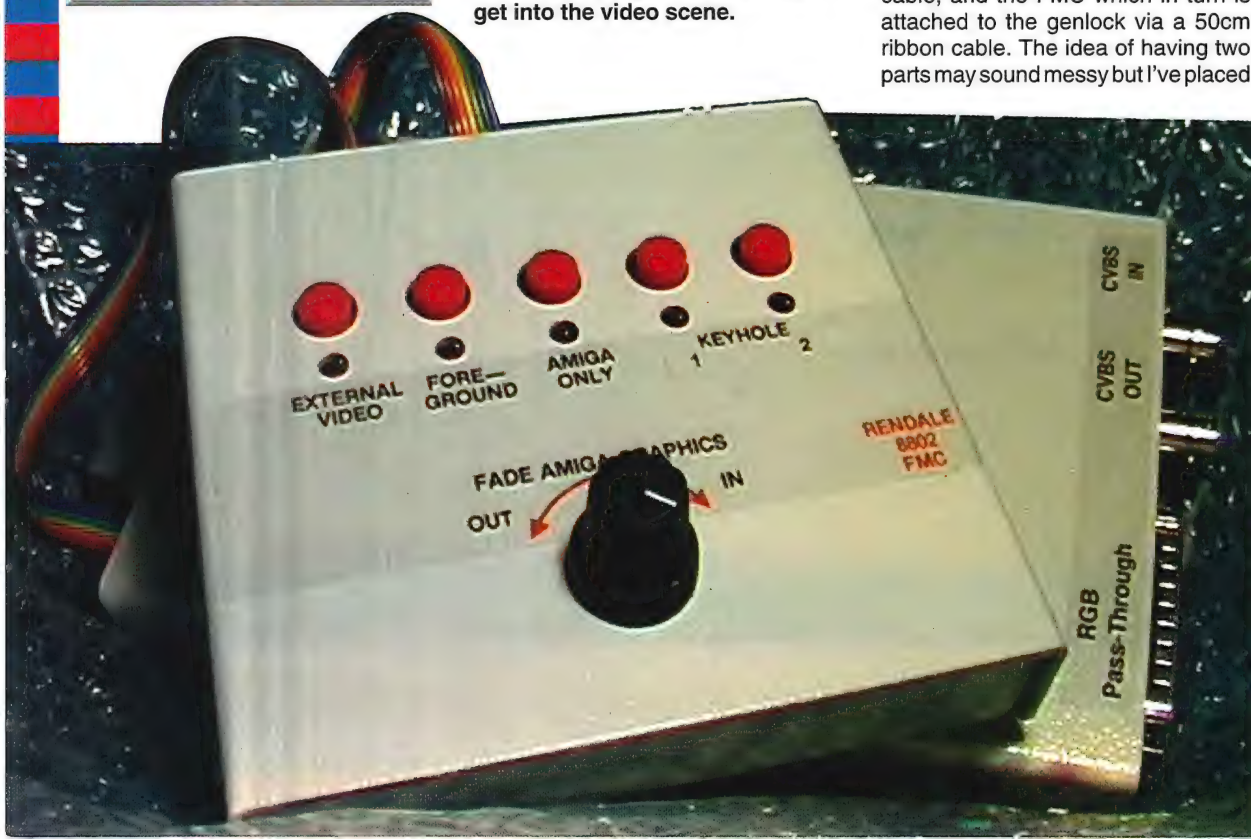
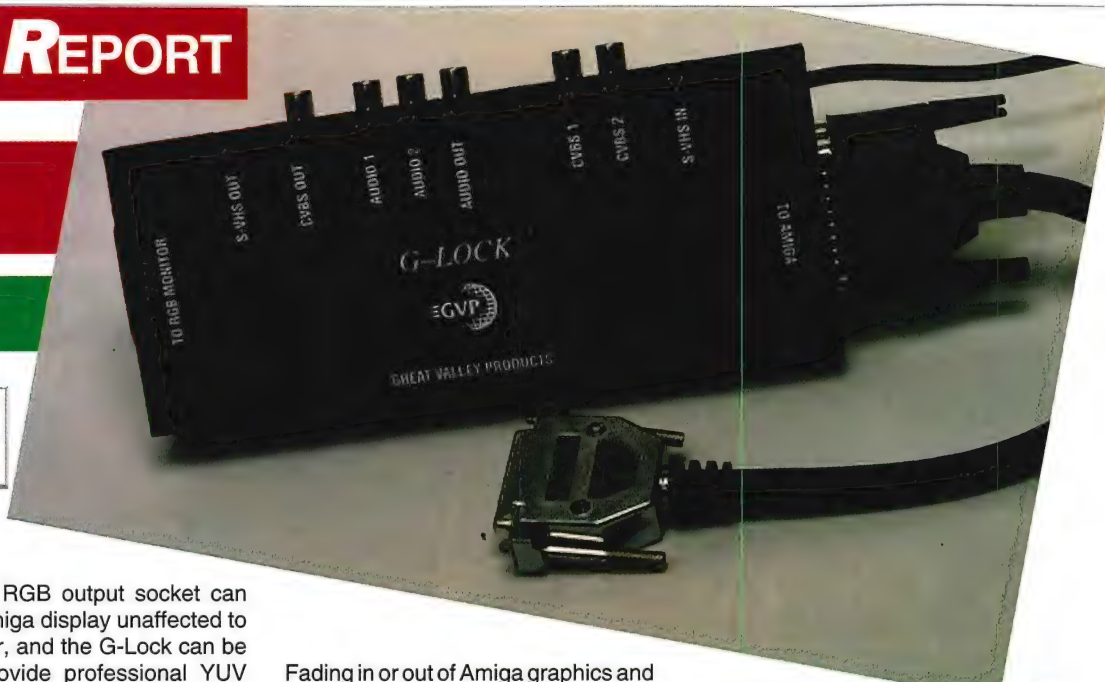
the genlock out of the way behind my Amiga leaving the very compact FMC next to the computer.

The disk drive-sized genlock has two BNC connectors for video in and output, and an RGB output feeds the Amiga display straight through to an RGB monitor. 1200 owners may experience a darker than normal RGB display but the 8802 can be adjusted by Marcam before they send it out to you, so be sure to tell them if you own a 1200.

Mode selecting is done on the FMC by pressing one of five buttons for video only, Amiga key, Amiga only, and keymodes one or two. The latter buttons are used to change the colours used to key Amiga graphics so you don't always have to use colour 0 as the key colour. Twiddling a knob on the FMC takes care of your fading across all modes, and that's just about it.

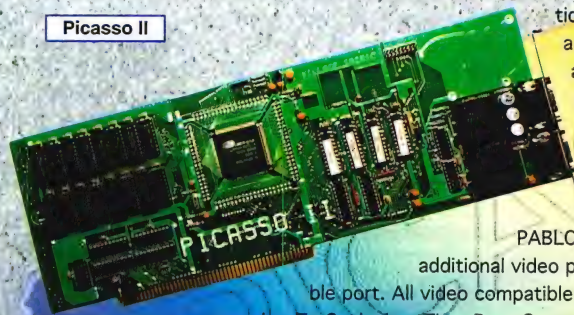
Conclusion

The 8802 has all the features you could want on an entry level genlock thanks to the FMC which is a notable addition. Picture quality is as good as any other device in this price range which makes choosing which genlock to buy an even more difficult decision.



PICASSO II is a graphics card with a difference. Picasso II offers true Retargetable graphics on any Zorro based Amiga, but the real power lies within the software! The installation is quick and simple, just plug in the card, connect the cables and run a fully automatic install script. You will now find new Picasso II resolutions available from the standard preferences ScreenModes program, and useable by all OS friendly programs. The new **CHUNKY** option offers incredible speed with a 256 Workbench. Picasso II will intercept any program when it is first run. You may then test its compatibility and set your preferred screen choice thereafter. Picasso II removes the 2Mb Chip RAM limitation, as all screens are stored in Fast RAM. You may therefore open as many large, colourful screens as your Fast memory will allow! Total screen configuration

Picasso II



tion is provided through PicassoMode, which allows the creation of custom screens quickly and simply. Picasso II comes with TVPaint Junior as standard, along with drivers for ImageFX, AdPro, ImageMaster, Real 3D and GIF, IFF, JPEG and MPEG viewers. Also included is MainActor, an animation program with Picasso II support. A TVPaint 2.0 option is also available.



Pablo Video Encoder



Picasso II Draggable Screens.

PABLO is the new Video Encoder option for Picasso II. Pablo offers the user two additional video ports, one for a standard Composite Sync Signal, and one S-VHS (Y-C) compatible port. All video compatible PAL devices can be plugged into Pablo, such as a colour TV or a video recorder. To Genlock, a Time Base Corrector is required. In use, the Intuition driver is switched to the video modes and all PAL resolutions are selectable from the standard ScreenMode requesters. There are five resolutions available, these being 320x256, 320x512, 640x256, 640x512 and 768x576 in all colour depths including HighColour and TrueColour! There is a protective circuit integrated into Pablo so that no modes with more than a 15KHz line frequency can be routed to the monitor. Therefore you can safely switch to higher resolutions for your normal computer display monitor without fear of damaging your video device.

PICASSO II 2MB £349.95

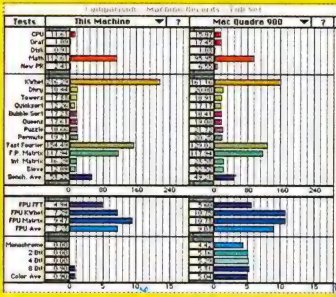
PICASSO II 2MB + TVPaint 2 £499.95

PABLO VIDEO ENCODER £149.95

Emplant is a very special product. Not just because it offers a total **Macintosh** solution every bit as good (and often exceeding!) the real thing. But also because together with the new **IBM** emulation module, Emplant offers a true multi-platform solution harnessed within your favourite computer. Here are some of the features of Emplant.

1. Compatible with all Zorro II/III Amiga's.
2. Compatible with all 68020/30/40 CPU's (the IBM can also use 68000/10).
3. Utilises the Amiga's memory, storage devices, parallel/serial ports and sound capabilities.
4. Supports all major graphics cards such as Picasso II, Piccolo, Retina/Z3, OpalVision, Rainbow II/III, EGS, etc. for mono, 16, 256, 65K & 16.8 million colour displays.
6. Support for all SCSI devices (Amiga side and emulation side).

All emulations multi-task properly (i.e. an Amiga application will continue to run simultaneously with the emulation). File transfer options are built in, as is support for up to six virtual screens (i.e. work in 256 colours and instantly switch to 16.8 million colours at any time!). The emulation speed is incredible! The new IBM module is fully 486DX compatible, speed dependant upon your 68xxx processor. Custom chips provide excellent IBM performance - All from the one board! SoundBlaster Pro and up to SVGA screens is all supported, plus lots, lots more!



EMPLANT ON AN A4000/040

EMPLANT BASIC £299.95 OPTION A (SERIAL PORTS) £349.95
OPTION B (SCSI INT) £349.95 DELUXE (SERIAL/SCSI) £399.95
AMIA (AMIGA-MAC INTERFACE ADAPTER) ALLOWS THE CONNECTION OF A 800K REAL MAC DRIVE £59.95

First there was the **Mac**
 now comes
 the **IBM PC** !!!



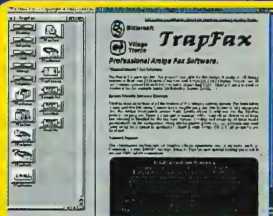
EMPLANT £299.95-£399.95

X-CALIBUR is a uniquely designed accelerator and RAM expansion unit for the A4000/040. It has the capacity to hold on-board 128Mb of SIMMS (The same standard 72-pin type as found on the A4000). By it's innovative memory design the X-Calibur out performs the regular A4000/040 memory access by 400% at 25MHz! This translates to an average of around 80% and an improvement in disk access of 10 to 20%! The X-Calibur is a piggy-back board to the A4000/040, so it is not taking up a precious Zorro slot. You can use the actual memory module of the A4000/040 (only Fast RAM) and gain the speed instantly. We can also supply a 33MHz version of X-Calibur, either outright or as a later upgrade. Faster upgrades (40MHz and a 68060 version) are planned in the future. Fully compatible with Emplant for a world beating Mac/IBM emulation engine!



- FEATURES**
- Memory bursting which doubles the memory speed.
 - Interleaved memory at 64 bits access for faster speeds.
 - Holds 128 Mb of RAM.
 - Upgradable to faster CPU's.
 - Does not require a Zorro slot.
 - Direct 68040 access. No system work-around needed.

X-CALIBUR 25 MHz £499.95 X-CALIBUR 33MHz £799.95



TrapFax is the most modern Fax program available for the Amiga. It works on all Amiga systems with at least 512K of memory and Amiga OS 2.04 or higher. You can use all fax modems compatible with the international standard CCITT TR29.2 Class 2 to send or receive a fax. TrapFax takes advantage of all the features of the Amiga operating system. The installation is easy and flexible, using Commodore's installer program, and is fully integrated into the Amiga Workbench environment. Configuration is achieved via the TrapFax preferences program. A fax queue manager controls send/receive of faxes in the background and faxes are easily viewed. Using the fax printer driver, you can generate and send faxes using your favourite application. The client/server architecture or TrapFax allows operations over a network, such as Commodore's new ENVOY package.

TRAPFAX £49.95



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Allows loading of a images (Memory dependant).
 Supports all Amiga resolutions (including AGA)
 Supports the Picasso II, Retina and EGS boards.
 Provides numerous image processing features:
 Detail Magnifying, Colour Corrections,
 Mirror Imaging etc.
 Saves in any Amiga IFF file format, starting from 16 colours to 24 Bit colour.
 Prints on all Amiga compatible printers, including colour where supported.
 Comes complete with manual and a Photo-CD.

£89.95

Genlock 290

£749.99 Hama

Hama's top of the range genlock wins the prize for the best looking peripheral reviewed here. But underneath it all, just how well does it perform?

The first thing you'll notice about the 290 after its appealing exterior are the dual T-bar sliders. Instead of a rotating dial or a slider which moves straight up and down, these T-bars are pivoted at the base while the T-shaped handle can be pushed up and down giving a perfectly smooth ride. Easily the most comfortable sliders of all the genlocks we looked at.

So what do the sliders do? Well, the position the other slider is in determines what one slider does. All kinds of mixing is possible, such as mixing from keyed graphics to video only, and you can even mix from solid graphics to video only by pulling one slider down and the other up!

With another combination of the two sliders, keyed graphics, video, or just graphics can be faded to black. These sliders have been very well thought out.



A separate button can be pushed to invert the keyed graphics which makes the background colour visible and the rest of the graphics reveal the video source underneath. Other controls allow red, green, blue, chroma, contrast and luminance balancing of the incoming video only. (It doesn't affect the Amiga's picture). Pressing the Bypass button literally bypasses the picture correction circuitry which can sneakily be used to cut from Amiga only to video only.

A monitor button toggles the display from the RGB output to show either what's going out from the YC and composite outputs (including all mixing) or just show the Amiga picture at all times.

The genlock also features some LEDs which let you know what type of video the genlock's receiving and which mode it's in. If needed, you can use the 290 as an RGB splitter for use with some digitisers.

Conclusion

For £750 you'd expect to get a lot for your money and the 290 just about stretches to give you all the features you'll want from a prosumer (professional/consumer) genlock. Our review model suffered from a slight horizontal shimmering of the Amiga's graphics but I reckon the review model is at fault. If we find out otherwise we'll post an announcement in the next issue. Other than that, the 290 will be of great interest to serious video users who want that bit more from a high quality product.



Hama's second genlock is aimed at a much larger market demanding quality, essential features, and a more affordable price. So let's see what goodies the 290 has to offer.

Looking just as yummy as it's big brother, the 292 also supports

Genlock 292

£299.99 Hama



YC video which is good news for SVHS and Hi8 users. Unfortunately the only socketry on board the genlock are for SCART connectors so you must make sure you have the correct cables if you're going to invest in the 292. On the positive side, the SCART connectors are wired for YC video and carry through the audio from your video source.

One of Hama's glidingly smooth T-bars is featured on the 292, although it can only be used for fading to black and not cross fading. As a result it's not possible to mix video or graphics in or out.

Instead you'll have to make do with four buttons for cutting to Amiga only, video only, inversed keyed graphics, or keyed graphics.

Three additional knobs control red, green and blue balancing of Amiga graphics. This is a useful method to tone down illegal colours which normally produce smeared, washed colours when played back from video. The video source unfavourably remains unaffected by these controls.

I think it's fair to point out that neither of the Hama genlocks worked with my Amiga 1200 because, Hama claimed, Commodore have changed the specifications on the latest 1200 motherboards without informing Hama beforehand. Luckily I had my trusty A500 to bring out of retirement which got the Hama brothers up and running!

Conclusion

The 292 is a good desktop performer which, however, could have been improved upon if the slider were used for cross fading as opposed to fading to black. This cosmetically refined genlock is definitely worth considering among the others in this class.



Get The Picture!

CCD VX1E Handycam

£2699.99 Sony

For our video tests we used Sony's outstanding VX1 camcorder which promised incredible images. But why is it so incredible? Well read on to find out!

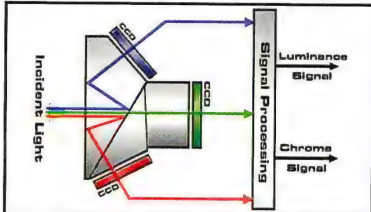
The VX1 is a Hi8 camcorder with a very big difference. Instead of having just one CCD like most cameras, the VX1 has a total of three. The camera's lens splits the incoming light into separate red, green and blue images (using a prism) which are projected onto the appropriate CCDs. Have a look at the diagram to help put you in the picture(!)

Each high density CCD consists of 410,000 picture elements which provides the video processing circuits with a single colour picture signal. The result is a stunning colour picture which is normally only obtainable with professional cameras.

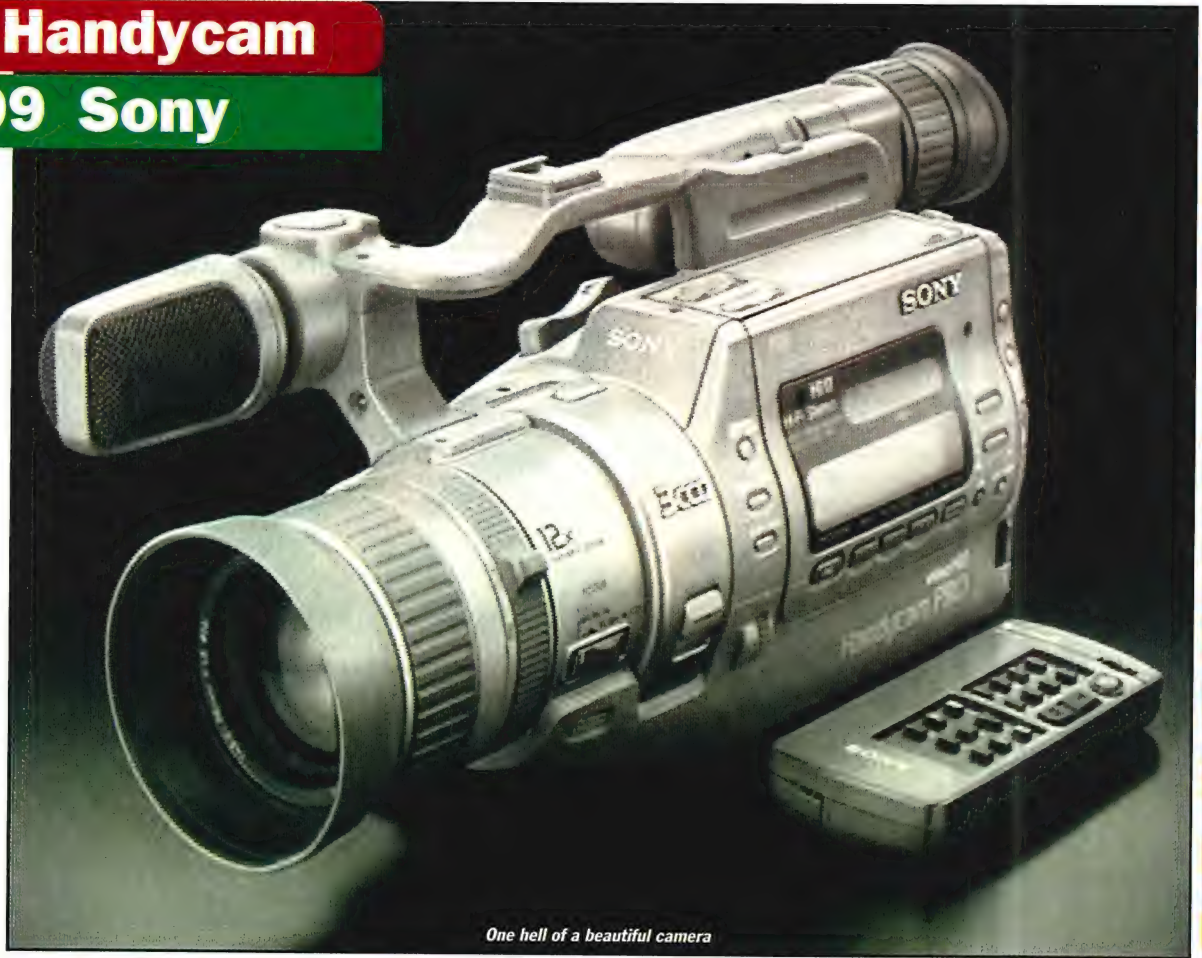
Testing all the genlocks with a professional quality video source ensures that the genlocks, quite frankly, don't process crap. After all, if you put rubbish in you get rubbish out!

The VX1 came in useful again when we had a look at editing products. Camlink's Editmate and Scala's Echo both read the tape counter from cameras using a LANC connection which the VX1 has. Additionally, it has a built-in RCTC (rewritable consumer timecode) generator. This means the camera is frame accurate when it comes to editing - a must for serious film producers!

Only 35cm long and 2kg with film and battery, it's a lot more compact than you'd expect from a camera of this calibre. Although it doesn't have any more features than a camera of half its price, you'll find that Sony substituted whizzy digital effects, PCM digital sound, a colour viewfinder, and other modern goodies for the technical excellence encased just preceding the lens barrel.



PCM sound and audio dub would have put the icing on the cake but I guess you can't have everything, even at this price. Clearly meant for professionals on the move, and wealthy Amiga owners, this is one hell of a beautiful camera. (Do I get to keep it now, Mr Sony? What do you mean, no?)



One hell of a beautiful camera

VIDI AMIGA 24 (RT)

£299 Rombo

Video digitisers are great fun to play with, but believe it or not there is a serious side to them too!

Rombo's top of the range digitiser packs 24 bit colour technology into an Amiga-white box no bigger than a pile of ten floppy disks. Plugging into the parallel port of all Amigas it provides high quality video digitising that's good enough to be used in magazines! And that's what we've done!

Nearly all of the pictures in this Video Special were taken with Sony's VX1 Handycam and digitised with Rombo's Vidi 24. The results, looking at the computer monitor, were excellent and

I just hope they come out okay in print!

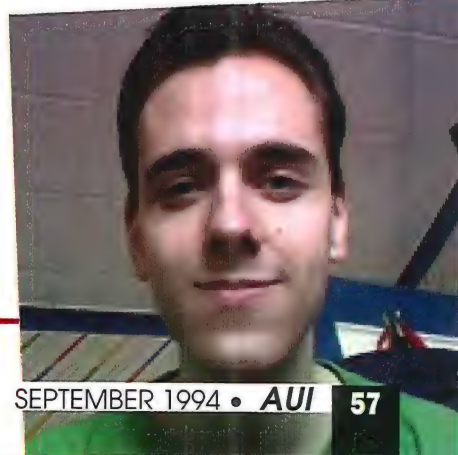
Sporting three inputs, two for composite video and one for YC, any one of the inputs can be selected from Rombo's control software. The hardware can grab a full PAL frame in just 1/25 of a second in resolutions of 720 x 576. The image is stored as YUV data in the Vidi's own 1Mb RAM and is transferred to your Amiga at 200k per second. Low resolution grabs are roughly four times quicker to deal with than high-res-lace grabs. The software can actually display 1472 x 576 pixels in HAM8 mode if you have an AGA Amiga (stunning!).

Continuous grabbing can be turned on if you want to grab a sequence of animation. The "Carousel" can then be

used to edit your animation and played back in realtime. The images take up a fairbit of memory (especially animations) so I'm surprised that there isn't any support for direct to disk recording like there is with VLab and FrameMachine. However, Vidi lets you save pictures as IFF in any Amiga screen mode, plus 12 and 24 bit, YUVN, BMP, TIF, Anim, and JPEG file formats.

Built-in image processing features (over 25 of them) allow you to improve your grabs or just add weird effects to an animated sequence!

...just to prove that our Gideon really exists! This file was saved using Vidi's JPEG saver and is 34k! The original was over 1000k!



Conclusion

Perfect for animators, DTP'ers, video production, or just having a great time with, the Vidi 24 is hard to beat. Colours are outstanding and really true to life, although I thought the images were (if anything) just a tad on the soft side. The software is pleasant to use and adds great value to the product. But how about actually including a power supply and direct to disk recording, Rombo?

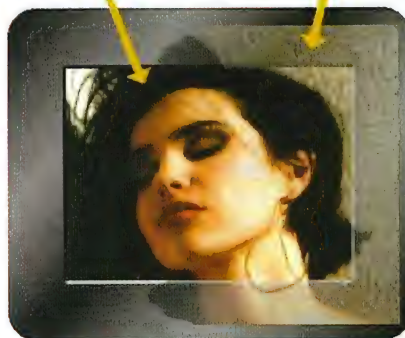
E•A•S•Y A•C•C•E•S•S

- Anti-alias:** This is the process that eliminates jagged lines particularly noticable on fonts. It's done by adding extra pixels and changing the colour of certain ones, which in effect soften the edges and makes the dominant pixels less noticeable.
- BNC:** A type of video connector much preferred by professionals. These BNC connectors twist and lock securely to stop them coming loose, unlike phono connectors.
- CCD:** Charged Coupled Device. This is the modern equivalent to the old tubes once used in video cameras. A CCD is made up of a tiny matrix of thousands of light sensitive diodes.
- Chrominance:** The colour part of a video picture containing hue and saturation values.
- Composite:** All elements of a video picture are encoded together so they can be send down one cable. Because of this, the resulting picture is not as detailed as an RGB or YC source.

Keying: The process when one video source is overlayed on top of another and the background of the overlayed source is removed revealing the video source underneath it. Whew! Some keyers allow one or a whole range of colours to be used for keying, such as a chroma-keyer. Others rely on a special video input for keying information.

- SVHS:** Super Home Video System. A reasonably high quality video system which records YC components separately. Backwardly compatible with VHS.
- VCR:** Video Cassette Recorder, as if you didn't know.
- VHS:** Video Home System. This was made popular in the early 1980's outselling Sony's Betamax and Philips V2000 formats, which were in fact better systems.
- YC:** Symbolically refers to luminance and chrominance, but sometimes just called S video. Equipment which processes video as YC achieves better results than it would do with composite video. Both Hi8 and SVHS machines process and output YC.
- YUV:** A partially encoded video signal (also called component) used by high end equipment and most professional TV companies. Miles better than YC but not quite as good as RGB.

Visible area **Overscan area**



This diagram (no expense spared) explains about overscan.



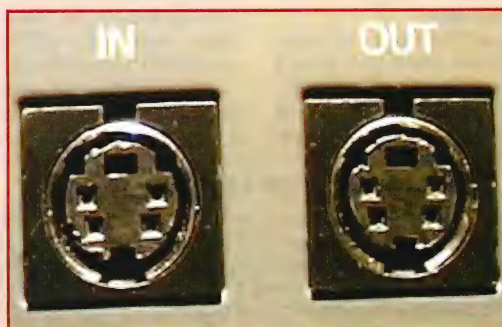
Interlace: Two fields are drawn in just 1/25 of a second so they appear as a single image.

- Encoder:** Amiga encoders take the RGB video signal and convert (encode) it into a PAL (or NTSC) signal.
- Genlock:** A device which processes a video signal and splits it into its component parts. It takes the timing signals from these elements and uses them to lock (sync) the timings with a secondary source. Effectively, it ensures both video signals tick in time with each other. Amiga specific genlocks also include a built-in keyer and encoder.
- Interlace:** A PAL video picture consists of 625 lines. The Amiga has up to 580. When the electron beam inside a TV or monitor scans the phosphor dots on a TV screen, it draws all of the even scanlines first in 1/50th second and then goes back and draws all of the odd scanlines in another 1/50th second. Because it happens so quickly, it gives the illusion of just one picture. This is called interlacing. One of the pictures drawn in 1/50th second is called a field. Both of the fields make up one frame.

- LANC:** A standard used to remotely control domestic camcorders/VCRs for editing. All modern Sony cameras support LANC. Panasonic have a similar system (mostly referred to as "5 pin") but it's not compatible with LANC.
- Luminance:** The brightness values of a picture, or pixel. Engineers quote black as 0 and 100% white as 1 (volt). The grey levels live between numbers 0 and 1.
- Overscan:** It does exactly that. The electron beam in a TV or monitor over scans the phosphor matrix of the screen with picture information, so the picture goes beyond the edge of the screen.
- PAL:** Phase Alternate Line. The encoded video standard used in Britain and most of Europe too. (The French use SECAM)
- RGB:** Red, Green and Blue; the three primary colours of light. Images processed and carried as the three separate RGB components can (normally) reproduce with exactly the same quality as the original.
- SCART:** This is a European standard for connecting together audio and video equipment, sometimes called Peritelevision. RGB and composite picture information and stereo



A pair of BNC connectors.



For your reference, these are YC or "S" video sockets.

Top Six Tips For Video Success

1. When recording Amiga graphics to tape, turn down the brightness of the top end reds and blues to stop colour bleeding. You can do this by knocking down the sliders by 15% in your paint package's palette control screen.
2. Be aware of the overscan area when designing graphics and titles. The graphics may fit nicely onto the screen when using the Amiga's monitor but check the results after it's been recorded to tape.
3. Always use proper 75 ohm video cables and not flimsy audio cables.
4. Try to film in well lit areas but don't film facing bright lights or the sun!
5. When editing make sure you use the original tape with the video footage and not a second or third generation copy.
6. If your equipment has YC socketry then try your best to use it.

Software that matches your Hardware

10011101
00110110
11110000

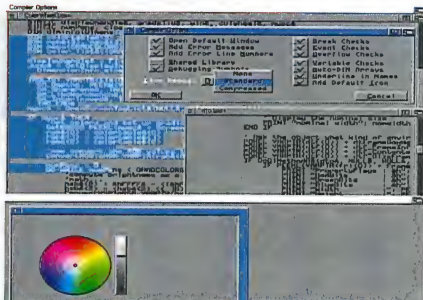
Programming

HiSoft BASIC 2 £79.95

HiSoft BASIC 2 is the new BASIC system for your Amiga, fully compatible with all Amigas from a Workbench 1.3 A500 up to an A4000 tower system running Workbench 3.

This exciting package sets new standards for BASIC programmers on the Amiga with full AGA and Workbench 3 support through the use of extensive and complete libraries.

This is the system for those who want to program real applications and utilities on their computer - a professional BASIC interactive compiler with an easy-to-use, multi-window editor and medium level debugger, producing super-fast, compact code in memory (for testing) or direct to disk.



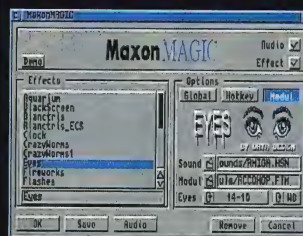
The HiSoft BASIC 2 package runs on all Amigas with 1Mb of memory or more and includes an extensive, 640-page user manual with tutorials, many examples and a complete reference section.

Upgrades are available from HiSoft BASIC version 1 and Power BASIC - please call for details.

Get the Amiga BASIC of the 90s today!



Utilities



Maxon Magic

The Maxon Magic screen saver works in all modes, even with graphic cards, and offers you a choice of 20 different amusing and entertaining modules such as Aquarium, Flying Breakfast, Fireworks, Crazy Worms, Messages, Clock etc.

This is the utility that you simply must own! Maxon Magic is a fantastic combination of 20 different animated screen savers, a system event sound manager and many amusing sampled sounds that will not only be incredibly useful but will give you and your friends endless enjoyment as well.

As if that isn't enough value for money, Maxon Magic also lets you assign sounds to most system events including Window/Screen open & close events, Alerts, Keys, Mouse clicks, Requesters and more. Choose from the many sounds provided or simply use your own sampled IFFs, created with a sound sampler such as Megaloud!

Only £29.95

With Maxon Magic your Amiga will never look or sound the same again!



Video/Music



VIDEOMASTER



The best-value real-time video digitiser you can buy; VideoMaster gives you the ability to record real-time monochrome video with sound at 25 frames per second as well as quality full-screen stills from your camcorder or video recorder. VideoMaster RGB includes our new colour splitter, ColourMaster, and produces amazing quality colour stills.

VideoMaster AGA works on the A1200 and A600, connects via the PCMCIA slot for extra speed and freedom to use other peripherals, allows high quality stereo sound and supports HAM6 and HAM8 up to 640 x 512 resolution for stills.



ColourMaster

ColourMaster is a new electronic colour splitter which works in conjunction with VideoMaster for stunning colour stills.

Clarity



Clarity16 is our premier sound sampler allowing rates up to 32KHz in 16 bit stereo and up to 48KHz in 16 bit mono on an A500; accelerated machines can handle faster sampling rates. The software provides extensive features including full edit control, a MIDI keyboard emulator, a sample sequencer, many special effects and FFT analysis. Version 1.5 has an up-to-date Workbench 3 look, in its own window and is fully compatible with faster Amigas.



Megaloud is the new 8-bit, stereo, direct-to-disk sampler package; the software is packed full of easy-to-use editing features, special effects and extras such as the ability to print waveforms and sample information.

The package allows sampling up to 84KHz mono and 56KHz stereo to memory and up to 21KHz stereo to hard disk on an A1200. Supplied with a hardware volume control and an extensive 144-page manual, Megaloud is impressive value at only £34.95.



Simulation



ProFlight

The classic Tornado simulator that works on all Amiga computers and provides maximum realism while being tremendous fun to play.

ProFlight is one of the most accurate, and therefore most flyable, aircraft simulators currently available for home computers - everything is there from the correct effect of the tailerons, elevators and rudder through complete navigational aids with auto-pilot up to sophisticated weaponry such as Sidewinder missiles and fly-to-line bombs. The accuracy of flight is top-notch, try this test with your other favourite simulator - turn the aircraft on its wing tips; most will continue to fly straight and level - the ProFlight Tornado will lose altitude, just like the real thing.

ProFlight comes complete with a professional, ring-bound, 190-page flight manual detailing all aspects of flying this exciting aircraft including a full tutorial and a history of the Tornado with archive photographs.

Limited Special Offers

As a special offer to readers of this magazine we have some amazing bargains, available only until 31 July 1994 and while stocks last. Order by phone or by mail and quote AX when ordering; please add £2 P&P.

Clarity16	£79.95
VideoMaster A500	£49.95
VideoMaster AGA	£59.95
VideoMaster A500 RGB	£89.95
VideoMaster AGA RGB	£99.95
ColourMaster	£49.95
ProFlight	£10.00

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great new games. Twice as fast and twice as powerful as any other games machine you can buy. Game over.

AMIGA CD³²
HAVE YOU GOT WHAT IT TAKES?

Echo EE100

£169 Scala

For Scala MM300 owners this little add-on is the best way to turn your Amiga into a video editing machine!

Scala users already have the titling, sound, and animation facilities, but adding the Echo expansion pack will control cameras and VCRs to create edited programs, complete with graphics and sound - and all in one pass I may add.

The Echo pack consists of a small serial interface with two long cables trailing from the back. The end of one cable plugs into the LANC remote edit socket on a camcorder, and at the end of the other cable you'll find and infrared "wand". This should sit in front of your remote control VCR which will be used as the recording device.

The Echo disk installs about 150 pieces of colour clip art, two new EX modules (Infrared and LANC) and a new utility which is used to teach Echo how to control your VCR. The teaching process is very easy. Click on a button marked "Train" and aim your VCR's remote control towards Echo's IR wand and press a button on the remote to

teach Echo the new command.

Once you've taught Echo all the basics (record, pause, etc) the information can be saved to disk so you don't have to go through this process again.

Editing is also simple. Load Scala and click on the new EX called LANC. A window appears with a large array of transport controls which, when pressed, your camera will respond to.

To enter the start of your first edit point, either type in the tape counter numbers or click on the Set button which reads the current tape position and enters the

numbers for you. The "out" point is done in the same way. If your camera has RCTC (timecode) then your edits should be almost frame accurate, but perfection is really down to your recording VCR and how you've set up Echo's preferences.

Hundreds of edits can be added and you can also include Scala graphics (if you have a genlock) and sound too. The running order of edits can be changed around in the usual Scala fashion by dragging the bars up or down to a new position. When you are done click on the Record! button and away it goes! Come back after dinner and your finished video is ready.

Tonnes of backgrounds and brushes come with Echo.

Conclusion

Even though £150 sounds a lot for a couple of cables and 2 EXes, you'll find Echo a brilliant addition which integrates very nicely into Scala. And, into the bargain, the IR remote can be used to control VCRs, TVs and CD players during Scala presentations!

With so much video related software to choose from, you really need a friend to guide you through the pitfalls. That's why we're here with a rundown of essential buys.

We've broken down our guide into several categories. You most certainly don't need a package from every category to start creating videos, so just start with something that you think is the most important for your needs. Be sure to check that your Amiga is capable of running the software before you buy. (RAM, hard disk, Workbench version, etc)

Titling

Using titling software is by far the quickest and best way to put text onto the screen. If you don't have the funds you could always revert to a paint package, but that's a slow method which doesn't give you the editing features of a proper titling program.

My personal favourite is Scala MM300 which, for £329, goes far beyond a titling package. It offers the best realtime wipes available, excellent text and picture handling while still being easy enough for a novice to use.

MediaPoint, £299, is similar in features to Scala but has more of a DTP feel about text editing. For the

Software

top level in font and caption quality check out Montage24. For about £280 you get results you'd never thought possible on an Amiga, but be warned; operation is VERY slow, even on the fastest Amigas.

Broadcast Titler 2 (about £200) provides the best broadcast quality fonts with many original wipe effects. It's worth buying just for captioning but I don't like software that trashes the Amiga's OS and doesn't multitask.

Scroller 2 (£99, Alternative Image) is a straightforward titling package which comes with 30 fonts, several wipe effects and very smooth scrolling. This too doesn't multitask but I can forgive it because it's aimed at low end users and doesn't need a hard disk. Nonetheless it's brilliant for all titling jobs.

3D Graphics

This is Barry McCarthy's territory so I'll be brief. 3D graphics can be used with great effect for animated titles, just like on TV. Be warned that there's a reasonably steep learning curve but you'll find it very rewarding.

The best packages to date are Imagine 3 (now coming available) and Real3D 2, but Lightwave (the easiest to use, and most famous) will topple them now it's being released in the UK as a PAL product.

Paint and Animation

Brilliance is by far the best in this category and you can now pick it up for around £140. DPaint IV AGA (£60) is a good value classic and everyone seems to have a copy of one version or another! Personal Paint 4 (Feb ish) is a good buy for £70 with image processing features but lacks animation facilities.

Special Effects

For the flashiest video effects around, Adorage 2 (£79) won't fail to impress with flips, tumbles, explosions and more. You create the graphics and Adorage takes care of the action! MorphPlus (about 150) offers image

processing, morphing and rippling, and many other quality effects.

Image Processing

Most of these packages offer a lot more than plain pixel tinkering. Art Department Professional (c£150) can handle every popular file format you can think of, plus it provides hundreds of possible effects and animation building abilities. ImageFX (£199, Silica) on the other hand is very similar in power but additionally provides 24 bit painting tools!

I haven't seen a new version of ImageMaster for quite some time now, but I've heard it's as good as the competition. (Perhaps a review soon?) For those on a budget, Rend24 is a shareware program which is superb at converting IFF files (24 bit, HAM8, 256 colours, etc) from one resolution to another. It also builds animations for you but doesn't provide any fancy tricks.

Utilities

Whether you're into video or fly fishing, Directory Opus (£49) must be the most essential utility ever created. It's a file management program which will change the way you use the Amiga and will certainly make you more efficient!

Editmate

£199 Meridian Distribution

This is a stand alone video editing package for the Amiga which is ideal for editing those long holiday and wedding videos. This is an unusual product because it comes with a three channel stereo audio mixer and microphone! The idea is that as Editmate is in the process of editing your camcorder footage, you can add music from a tape deck, or CD,

and mix it in with narration using the supplied microphone.

Editmate's hardware plugs into the parallel port and two connectors hang out from it. To either connector you can plug in the LANC, Panasonic 5 pin, or infrared attachments. This allows Editmate to use most Sony, Canon and Panasonic cameras/VCRs as the playing machine, and the same again

Conclusion

Editmate is moderately marred by its accuracy (it works to the second, not the frame, although I managed to get edits in 9 frames early and 4 frames late at best), and tape searching is done using a visual scan and not a fast wind (yawn!). Also the hard disk installer insisted on using DH0: but I don't have a drive called DH0!

As it is, Editmate gets the job done providing you don't demand frame accuracy or any fancy extras. It should be priced a little cheaper considering the mixer can be bought for £35 separately. I can see Editmate being put to good use to edit holiday videos or even concept editing of more professional productions. The audio extras are a helpful bonus which can potentially add a distinctive dimension to those otherwise boring family videos.



plus infrared VCRs as the recording machine. Bear in mind that just 3 attachments come with Editmate, one of each type.

Choosing the edit points is done by clicking on the In and Out buttons when you've found the right place on the video tape. Clicking on the Program

button advances on to the next edit number - 2 if it's going to be your second edit, and 3 is it's your third...

The whole edit list can be displayed only when you're in the edit editing screen, where edits can be altered manually and cut and paste operations performed.

THE RATINGS

The ratings for the genlock and editing product reviews listed on this page were calculated as a direct comparison between products. Hence the overall percentage shown is the average of all the marks awarded to that particular product. 60% is satisfactory, 70% is good, 80% is very good, and 90% is excellent.

The Fade Quality (see the results table) refers to the smoothness of the fader control on the genlock and the resulting picture quality of the fade. For the Picture Quality, we looked at the composite or YC output from the genlocks and took note of sharpness, keying quality and a faithful reproduction of the original video source.

Keeping this between you and me, if you are planning to use domestic TV and video equipment (i.e. TVs and VHS machines sold in high street stores) you'll find little difference in picture quality when using most of these genlocks. (Some manufacturers may well strongly disagree with me!) The truth is, in practice, you need a new good quality monitor (ideally with a YC input) and a high band VCR, like SVHS, if you really want to see what separates the genlocks apart.

Anti-A, from Zen, is the program I use to convert normal Amiga fonts into gorgeously smooth, fully anti-aliased fonts for use with most titling and paint packages (Scala, DPaint etc). This is highly recommended if your work requires clean broadcast quality fonts.

Finally, ADPro users must check out ProCONTROL because it's the easiest way to create impressive multi-layered animations and other automated jobs. You don't need to learn AREXX. If you can use ADPro then you can use ProCONTROL!

PRODUCT	PRICE	FADE QUALITY	PICTURE QUALITY	FEATURES	PERFORMANCE	DOCUMENTATION	VALUE FOR MONEY	OVERALL
Y-C-GENLOCK	£350	7	8	9	9	8	8	82%
MINIGEN	£50	N/A	6	4	7	7	10	68%
MINIGEN PRO	£150	6	7	6	7	7	8	68%
GENESYS	£934	10	10	8	9	8	8	88%
VIDEO CENTER	£581	7	9	8	7	8	7	77%
8802	£178	7	7	7	8	8	8	75%
G-LOCK	£300	6	9	9	9	7	9	82%
HAMA 290	£750	10	8	10	9	7	7	85%
HAMA 292	£300	9	8	7	8	7	8	78%
SCALA ECHO	£150	N/A	N/A	9	8	7	7	78%
EDITMATE	£200	N/A	N/A	7	7	7	7	70%
VIDI 24 (RT)	£300	N/A	10	9	9	9	8	90%

CONTACTS SUPPLIERS DIRECTORY

Alternative Image
Lothair Road
Leicester LE2 7QB
Tel: 0533 440041

G2 Systems
5 Mead Lane
Farnham
Surrey GU9 7DY
Tel: 0252 737151

Hama PVAC Ltd
Unit 4
Cherrywood
Chineham Business Park
Basingstoke
Hampshire RG24 0WF
Tel: 0256 708110

HiQ Ltd
176 Kenton Lane
Harrow, Middx HA3 8SU
Tel: 081 909 2092

Lola Electronics Ltd
4 Braybrooke Road
Little Bowden
Market Harborough
Leicestershire LE16 8AD
Tel: 0858 431072

Meridian Distribution
East House
East Road Trading Est
East Road
London SW19 1AH
Tel: 081 543 3500

Marcam Ltd
62 Tenter Road
Moulton Park
Northampton NN3 1AX
Tel: 0604 790466

Rombo
Baird Road
Livingston
Scotland
EH54 7AZ
Tel: 0506 414631

Scala UK
Mill Studio
Crane Mead, Ware
Herts SG12 9PY
Tel: 0920 444294

Silica
1-4 The Mews
Hatherley Road
Sidcup
Kent DA14 4DX
Tel: 081 309 1111

Sony UK
Sony House
South Street, Staines
Middlesex TW18 4PF
Tel: 0784 467000

Zen Computer Services
2 Silver Birch Grove
Swinton
Manchester M27 5FZ
Tel: 061 793 1931

Not Drowning

Well, it's finally happened. What? Actually several things.

1 *Imagine 3.0 is finally, actually, really here. Hoorah! (Or maybe not...)*

2 *Lightwave is released as a stand alone product (no Toaster dongle). In PAL. Now we'll find out if this really IS, the ultimate 3D animation system.*

3 *I've stopped using Imagine. WHAT?!*

To tell you the truth, the third fact is somewhat connected to the first and second fact.

We've waited well over a year and a half for Imagine 3.0. That's a lot of time to iron out the bugs and add all the necessary goodies that were missing from version 2.0. A proper interface and generally more intuitive throughout. Yes? No. Imagine 3.0 is just like Imagine 2.0, but more complicated and harder to learn.

What the hell have Impulse been doing for all this time? I know that there ARE a lot of new things in the program since 2.0 and yes there are some changes to the interface but that's just not enough.

Didn't they look around at the

competition? Lightwave and 3D Studio 3 are the only commercially useable packages at this level. Why?

Imagine 3.0 seems to be designed by a bunch of very clever people. Clever programmers, mathematicians but not animators. Products need to be designed by the people who use them. Animators and artists should design animation and painting programs. Otherwise you get this attitude; "Hey! Let's add that and this and that and that, neat, cool, groovy, wow..."

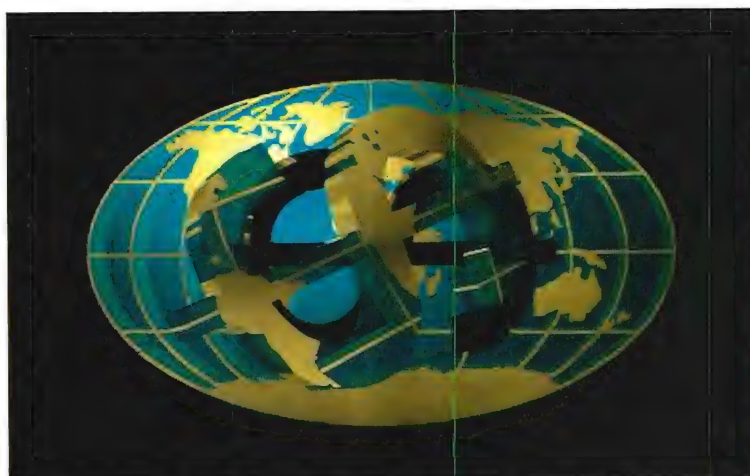
What this actually means when the animator comes to use the program is; "What the hell do I want that for and why didn't this go there and why is it all so messy and awkward to access?

3D TIPS

Barry McCarthy goes overboard but it isn't about what you could imagine.



Piecing together the picture, this animation builds a global solution.



The rendering quality is head and shoulders above the rest.



The interface for creating the anim.

... But Waving!

Why is there so much irrelevant material? I just want everything to work the way I would expect it to. Death to complicated, unfriendly interfaces. I've been struggling for too long and I simply refuse to have to any more."

And that's why I use...

Lightwave. I learnt it in ONE day and I've never used Imagine again. I didn't even stop production to learn it. I simply swapped over from Imagine to Lightwave, while starting my next animation.

That's impressive. For the program, not for me. It would take me longer to learn the differences between Imagine 2.9 and 3.0, than to learn the entire Lightwave program.

Never have I come across a program that is so well designed for its job. And why might that be? Because it's designed by an animator. Everything works the way you expect it to.

Everything WORKS! Nothing is irrelevant, everything is genuinely useful. It's like the 3D equivalent to Deluxe Paint III.

LIGHTWAVE TIPS 1

Right, let's dive into Lightwave with a couple of handy hints and tips.

One of the best things about the way Lightwave constructs animations is the automatic spline path generation.

The part of this that's not automatic is the behaviour of the key points. You can access the Spline Controls requester and alter Tension, Continuity and Bias. Hmm. What they mean is Acceleration, Sharpness of the knot and which side of the knot has is most influenced by the curve. Hmm. Ok, let's give it a practical application and you'll see what I mean.

Set up a really simple object with 3 key frames at 0, 15 and 30, to form a curved spline path. That should take about 3 minutes, if that.

Make sure you're still editing the object. Now go to frame 0, hold down the T key on the keyboard and move the mouse about.

Interactive Tension adjustment. A value of 1 will give it a nice acceleration from zero. Go to frame 15, hold down C and adjust the Continuity with the mouse. Do you see what it does? Basically it's hardly ever needed, except perhaps with the bottom of a bounce on a bouncy ball path. It just makes the curve less

curved. Put C back to 0 at frame 15 and try adjusting Bias with the B key. You'll see that the curve can be pushed to either side of the knot.

All fairly simple and constantly used, once you realise what they do and how to alter them interactively. More tips for Lightwave next time.

Till then, throw away Imagine 3.0 and Real 3D 2 and go and buy Lightwave immediately.

HELLO!!!!

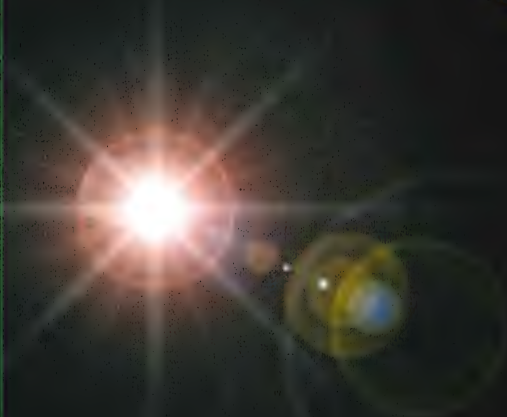
That's for the programmers of Imagine 3, Real 3D 2... Take note lads and lasses. THERE IS NO OTHER 3D ANIMATION PACKAGE WORTH CONSIDERING ON THE AMIGA FULL STOP.

Baz's votes for best hardware and software 1994:

The Personal Animation Recorder. Lightwave 3.1 Standalone.



Universal, eat your heart out!



The lensflare effect is very popular because it's so effective.

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Questionnaire

Please complete in block capitals

1. Mr ☐ Mrs ☐ Ms ☐

Surname: _____

First Name: _____

Address: _____

Post Code: _____

Tel No. _____

I am seriously interested in meeting someone through Dateline.



2. Personal Information

Marital Status: Single ☐ Divorced ☐Widowed ☐ Separated ☐

Religion: _____

Age: _____

Place of Birth: _____

Do you have children of your own?

Yes ☐ No ☐

If yes, how many live with you? _____

3. Your personal details

Height: _____

Build: slight ☐ medium ☐ large ☐

Hair colour: _____

Dress/Looks: casual ☐ fashionable ☐
elegant ☐ sporty ☐

4. Your work

Present job: _____

Self-employed ☐ employed ☐civil servant ☐ manual worker ☐part-time ☐ not working ☐unemployed ☐ in-training ☐

Schooling

O levels / GCSE's ☐ A levels ☐Further Education ☐ Polytechnic ☐University ☐ Business School ☐

Other: _____

5. Your Personality

☐ Warmhearted ☐ Fashionable☐ Serious ☐ Practical☐ Considerate ☐ Conventional☐ Shy ☐ Reliable☐ Romantic ☐ Adventurous

6. How would people who know you best describe you?

☐ always ready for a joke☐ somewhat dreamy☐ never has problems☐ takes life a bit too seriously☐ not easily upset☐ always active☐ chatty

PLEASE ENCLOSE 3 FIRST CLASS STAMPS

7. Your interests

☐ Wining/Dining ☐ Jazz/Folk music☐ Pubs ☐ Classical music☐ Sports/Keep fit ☐ Theatre/Arts☐ Politics/History ☐ Watching TV☐ Reading ☐ Smoking☐ Travelling ☐ Drinking☐ Science/Tech ☐ Children☐ Cinema ☐ Homemaking☐ Pets/Animals ☐ Gardening☐ Pop music ☐ Countryside

8. Details of the partner you would like:

Minimum age: _____ Maximum age: _____

Height: min. _____ max. _____ Don't mind ☐

Children?

Yes, at home ☐ Yes, living elsewhere ☐None ☐Marital status: Single ☐ Divorced ☐Widowed ☐ Separated ☐Don't mind ☐

9. Which of the three pictures do you prefer? (tick the box)

Dept. AMI 02

Please answer the questions above, cut out this page and send it to us at

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or call us now on 071 938 1011

Amiga CDROM Software

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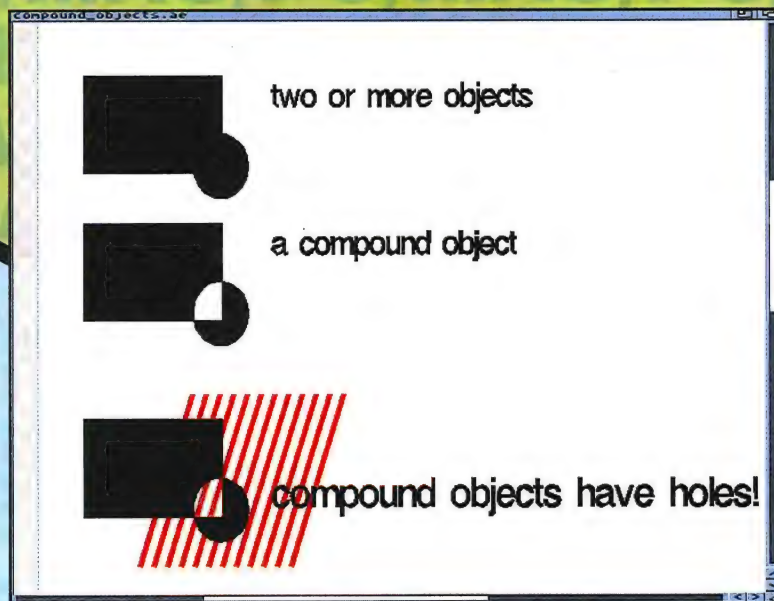
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Sooner or later, when using your Amiga, you'll discover that you are going to have to get it to communicate with the outside world - whether simply printing your work, or having it talk to other computers.

This article is concerned with graphics. The Amiga has for a long time been an ideal machine for creating and manipulating graphics, particularly bitmap graphics. Unfortunately, most computing people use Macs and PCs, and if work is going to be used on a platform other than the Amiga you'll have to produce it with this in mind.

On Amiga to PC transfers, you can use a file compression utility such as LHARC.

Actual file transfer is not a problem, unless the files are particularly large. Workbench 2.1 upwards comes with a utility called CrossDos which allows you to read, write and format MSDOS format 3.5" floppies, treating them as if they were normal Amiga disks. These can then be used on a PC with a 3.5" drive (almost all have these days) or a Mac via a utility such as PC Exchange, Dos Mounter or Access PC (which behave like CrossDos does on the Amiga) or, failing that, Apple File Exchange, which is not as refined but does the job. If you are using a pre-2.1 Workbench, you may be able to get hold of a stand-alone version of CrossDos, or use a PD equivalent such as MessyDos.

Compression

If your files are too large to fit on a disk, try using a compressed format such as JPEG, GIF or TIFF (with compression) to get the file size down. These will, of course, only work with bitmap images and will not be desirable in some cases. On Amiga to PC transfers, you can use a file compression utility such as LHARC. Make sure that the target machine uses the same standard.

Sometimes this will not be possible or compression won't compress the image enough. If you have Art Department Professional you could

use the Splitz and Joinz programs that are supplied with it, in DOS, Windows and Mac formats as well as Amiga. This simply chops a large file into smaller pieces and then reassembles them at the other end.

Failing that you could always try a serial or modem link! If you are lucky enough to own a magneto-optical drive (there must be one on the target machine as well!) which can store upwards of 128 MB per disk, you can always use the cross platform ISO 9660 disk format which is readable on all three machines with the right drivers.

What really matters is file format. There is no point using IFF ILBM, for instance, if the software that the file will be used with on the PC doesn't support it. While it would be agreeable if everybody used the same formats, the reality is that they don't, and your life will probably be easier if you try to conform to their requirements rather than they to yours. So what formats are the most suitable?

Bitmap Graphics

These are the graphics that you'll most likely want to exchange with other platforms, as the software on the Amiga is biased more in this direction than to structured graphics. There are several formats from which to choose, and you should select the one best suited to your needs.

Photographic style images are best suited to the TIFF and JPEG formats. By "photographic" I mean images that have lots of colour such as 24 bit or HAM8 images. This would include graphics such as ray-traced images as well as scans of photos or video grabs.

If you can get by with a little loss in quality, then JPEG is probably your best bet. With this kind of image, JPEG can achieve enormous file compression, sometimes without percep-

tible loss in quality (normally you can define this level yourself). If you need total fidelity, then TIFF is your best bet. TIFF supports various compression schemes which do not affect image quality, but not all applications support compression - check that the target application does or you'll come unstuck. It is a crying shame that ASDG still insist on charging extra for a TIFF saver module for AdPro. ImageFX and some PD programs can save in TIFF, however.

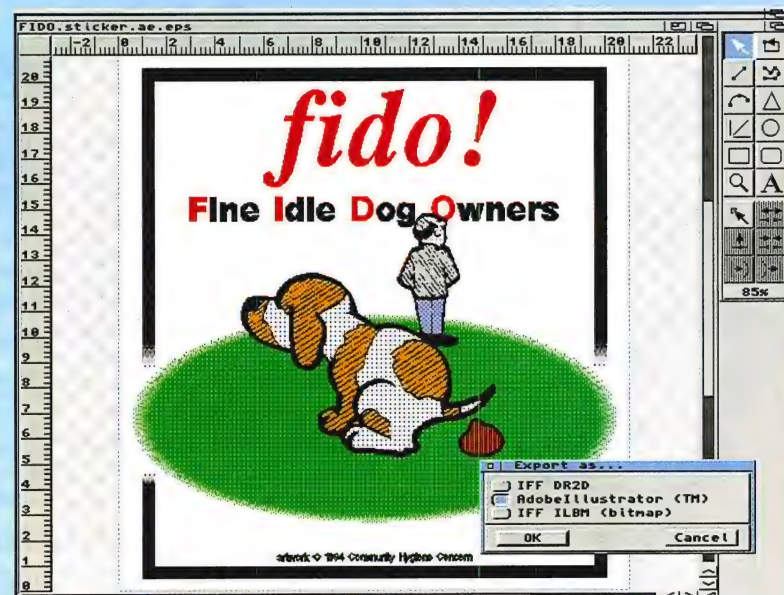
If your image uses 256 or less colours, then TIFF is still fine but the GIF format may be a better option as it is very common on the PC, although I've had problems with older programs not fully supporting the more recent standard, so do a test first. GIF isn't very common on the Mac so you may stick with TIFF or try the MacPaint format. If your image requires absolute pixel fidelity - a common need with low-colour images (e.g. a screen grab of an application), that don't have thou-

sands of colours to blur inaccuracies - DO NOT use JPEG.

Separation

If you are preparing an image for print use,

bear in mind that it will have to be converted from using the RGB (Red Green Blue) colour model to CMYK (Cyan Magenta Yellow black). This process is known as colour separation. The only widely used bitmap format that supports CMYK images is a variant of TIFF. Unfortunately there are no programs currently available on the Amiga that can create CMYK TIFF files. This isn't too much of a

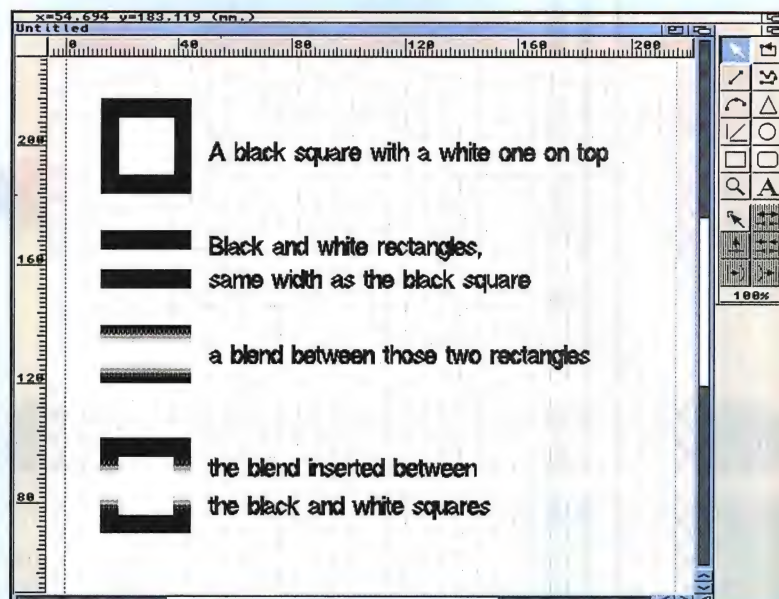


problem if the image is going to be used in an Amiga DTP program such as Professional Page or PageStream as these can perform separations of RGB files when printing, but if the image is going to be used on a Mac or PC running, say Quark Xpress, it will ultimately need to be in the CMYK TIFF format.

The program most commonly used to handle these files is Adobe Photoshop. The latest version can also read and convert JPEG and some IFF files, and almost everyone involved in colour DTP will have Photoshop to hand, so preparing bitmap images for DTP on other platforms isn't too difficult.

standard in itself does not make many stipulations about the way the image is created. So while any EPS supporting package can import an EPS file, and possibly crop, scale and rotate it, it may not necessarily be able to edit it or even display it properly (to display it would require a PostScript interpreter to "run" the PostScript code in the EPS file).

To get around the display problem, many EPS creating programs create a bitmap preview which is embedded in the EPS file. Without this preview, an EPS file will normally appear as a crossed out or greyed box and the true image will only be revealed when printed to a PostScript printer or an on-screen preter such as Freedom of Press on the Mac or PC or



No Amiga an Island

Aitor Elbarra, in the first of a series on linking the Amiga with the outside world, shows how you can use your Amiga to transfer graphics to other computers.

Structured Graphics

If your image is a structured graphic, then it seems that you only have one choice, which on closer examination turns out to be a multitude of choices - Encapsulated PostScript - EPS. EPS is the only (almost) universally supported standard for structured graphics (unless we are talking about CAD or 3D models which mostly use the AutoCad DXF format) but it is really a collection of standards.

EPS is a subset of PostScript, which is a programming language that specialises in describing images for print (and display, but that's another story!) and as with any programming language there are many ways of doing the same thing. The EPS inter-

the excellent value (free - it's PD) if unreliable POST on the Amiga.

Previews

Unfortunately, none of the Amiga EPS-producing programs can save an EPS with a preview.

In order to get the preview I needed, I had to resort to using a Mac! I loaded my image (exported from Art Expression in Illustrator 88 format) into Adobe Illustrator 5.0 and saved it again with a preview. I did this twice, once for a PC preview and again for a colour Mac preview. Colour previews tend to be in TIFF format and many PC DTP programs can display Mac colour previews, so don't worry too much about compatibility, just make sure you provide both versions.

It is possible to get around the problems of the lack of compound objects and graduated fills with a bit of thought.

Illustrator

The only editable EPS format which is common to the Amiga, Mac and PC is Illustrator 88 (not to be confused with the other Illustrator formats). This is rather limited - it does not support graduated fills or compound objects (objects with holes in them) - but it is supported on the Amiga by Soft-Logik's Art Expression. Future support for the more recent and much more sophisticated Illustrator 5 format is promised.

It is the only option if you want to create structured graphics that are editable on machines other than the Amiga. Most EPS clip art collections are in Illustrator 88 format because almost every drawing program supports it.

It is possible to get around the problems of the lack of compound objects and graduated fills with a bit of thought. The best way to show you these methods is to take you through an example which I created with Art Expression - the "FIDO!" sticker.

The brief for this piece of artwork was to create a file which could be edited by others - in this case to add the name of the particular local authority which had bought the right to use the artwork. The best way to do this was by using an Illustrator 88 EPS file with a preview image, so the clients could use either a drawing program to edit the actual file or a DTP program to overlay the text over the EPS, using the preview as a positional guide.

The text in the artwork was created using Art Expression's text tool, and then converted into shapes.

You should always do this unless you are absolutely sure that your machine, the target machine, and the target printer are using EXACTLY the same PostScript Type 1 fonts. If you are using large amounts of text, or the text needs to be edited, then it better to keep text as text, but make sure you are using the right font - it is safest to stick with one of the "classic" 35 fonts built into most PostScript printers. Unfortunately the Illustrator EPS format does not support the embedding of fonts into the file which would overcome this problem.

Faking graduated fills is not too difficult, but leave creating them until a late stage in the creation of the artwork as they are difficult to edit once created and will slow down screen redraw - this is because instead of filling a shape with a graduated tint, you are actually creating lots of shapes each with a different tint.

The more steps you use in the blend, the smoother the graduation will be, avoiding "banding". The black faded border in the FIDO sticker was created by overlaying a white square (well almost square, actually) over a larger black square - remember, no compound objects!

In between these squares I inserted a blend from a black rectangle to a white rectangle with the same width. The green ellipse was blended to a white ellipse to give the effect of the grass fading into the white background.

With practice, these blends are actually more versatile than proper gradient fills as they 'tween' shapes as well as colours. The downside is that they are harder to use and edit, and slow screen redraw considerably. They also increase the size of your file.

As you can see, getting images from the Amiga to Mac or PC can sometimes be a long-winded process, but it is far from impossible, as long as you keep in mind the considerations I've mentioned earlier. **AUI**

SIERRA WORLD CUP EDITION

Sierra/Coktel £24.99



We're losing, but now one of theirs is off.

It must be World Cup Final year. As if there wasn't enough in the way of footie games out already, we are faced with a veritable army of them about to be released. First off the blocks comes this one, followed very sharpish by US Gold's World Cup, Kick Off 3, Audiogenic's Wembley and Empire Soccer, not to mention the plethora of management sims that are also on stand by. Just think what would have happened if England had actually qualified!!

Personally, I think that the benchmark was truly set with Sensi and although there are many pretenders to the crown that promise to offer more, inevitably, the cracks show within minutes of playing the game.

Full marks to Sierra though. Being an American organisation, one would expect any football game to be of the grid iron variety, although I can confirm that this one is soccer through and through, but quite why they would choose pensioners to play is beyond

Team Selection									
	Pos	St	PS	Mo	Sh		Pos	St	PS
1 GK	Seaman	13	11	17	17	11	1 GK	Seaman	13
2 RB	Robins	14	11	17	17	11	2 RB	Robins	14
3 CB	Lea	15	11	17	17	11	3 CB	Lea	15
4 LB	Holmes	16	11	17	17	11	4 LB	Holmes	16
5 FB	Robins	17	11	17	17	11	5 FB	Robins	17
6 ST	Shaw	18	11	17	17	11	6 ST	Shaw	18
7 ST	Shaw	19	11	17	17	11	7 ST	Shaw	19
8 ST	Shaw	20	11	17	17	11	8 ST	Shaw	20
9 ST	Shaw	21	11	17	17	11	9 ST	Shaw	21
10 ST	Shaw	22	11	17	17	11	10 ST	Shaw	22
11 ST	Shaw	23	11	17	17	11	11 ST	Shaw	23
12 ST	Shaw	24	11	17	17	11	12 ST	Shaw	24
13 ST	Shaw	25	11	17	17	11	13 ST	Shaw	25
14 ST	Shaw	26	11	17	17	11	14 ST	Shaw	26
15 ST	Shaw	27	11	17	17	11	15 ST	Shaw	27
16 ST	Shaw	28	11	17	17	11	16 ST	Shaw	28
17 ST	Shaw	29	11	17	17	11	17 ST	Shaw	29

me... or is that the game just runs very slowly...

Before we get into the meat and two veg of pulling this one to pieces, let's take a look at the many options available to you in the game.

There are 24 World Cup teams, each with a squad of 22 named players, along with the option of custom making as many of



We won the cup!

sent off. Unfortunately, all this supposed intelligence doesn't stop the ref from walking straight through advertising hoardings when he's marching a player off the pitch.

Talking of sendings off, the ref waves yellow and red cards with gay abandon, which actually is quite a cute piece of animation. I also enjoyed the

imagine a center forward bearing down on your goal and Sol Campbell in the perfect position to intercept, only to suddenly veer away and your control switch to a player the other side of the field!! Guess what. You're one down! This is the real engine room of any footie game, so suspect player intel and a dodgy kicking routine is a terminal problem in anybody's language.

The truth of the matter is that Sierra have tried to pack in too much window dressing without addressing the real playability of the game. 4,000 frames of player animation is fine, but if it means slow action - forget it.

Computer football has really come of age and it's no use software companies trying to get in on some commercial action if the product is not up to it. Sensi is always going to take a lot of beating and unfortunately Sierra just doesn't do it for me.



At last, it's in the net.

your own teams and players as you like. The only limit is 40 to a disk! Each player stats reflect his ability and performance i.e. pace, stamina, passing, heading, etc and you can even choose skin type and hair colour.

There are a number of areas which Sierra have taken pains to point out are new in footie sims - intelligence being one of them. This new intel means that referees and linesmen supposedly make more accurate decisions, regularly tackled players eventually become injured and the team's formation auto reforms when a player is

little routine where the physio runs on to treat the poor guy wriggling in agony from a misjudged slide tackle and the stretcher bearers, who rush on for the terminally injured!

The free kick and corner system, whilst designed to be very adaptable, is in reality a poor routine. You can adjust the height, distance and strength of the kick using a combination of all four joystick positions but unless your chosen player is an expert in dead ball situations the end result is a lottery.

The computer also seems to have a real problem deciding which defender is nearest the ball, which causes complete havoc when you need to do some quick defending. Just



This is looking very dangerous.

VERDICT

Graphics:	75%
Sound:	70%
Gameplay:	45%
Overall:	51%

The comprehensive team info screen gives you the best mix.



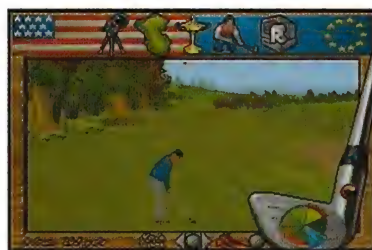
A dark and depressing scene - most apt.

Sam Snead, that great golfing champion once said: "Playing golf is easy; it's thinking about it that's hard." Of course, he was referring to the pressures of playing on the pro tour for big bucks and not commenting on Ocean's new golf game, which had they taken his advice might just have left it on the drawing board.

Ryder Cup Golf, was actually first released under the name Ocean Golf and quickly withdrawn after howls of protests from customers demanding their money back for such an appalling game. I am fortunate (depending on your sense of humour) to have in my possession one of the few Amiga versions in existence. This collectors' item was brilliant in its uselessness as a competitive golf game. All you were required to do was centre your cross hairs over a wobbling ball graphic and press fire. From then on you sat back and watched as miraculously your ball sped off the club faster than a speeding snail and somehow found its way through gorse and trees onto the fairway 250 yards further forward. You then waited whilst the computer toiled away drawing the next vista and began the process all over again. Finally on the green in 2 (every time) you had to somehow guess exactly how hard to hit the putt and invariably holed out from there in 9!

The programmers had admitted to me in a previous PR piece, that they had never played golf in their lives and merely took the game in it's most basic form and interpreted it onto a computer program. And boy did it show!

Having been smartly put in their place by the general public, Ocean 'ditched the whole thing and completely rewrote it' using the Ryder Cup as a great competitive backdrop. This competition is actually played every two years between Europe and the United States and the teams comprise of the very best of the touring pros from each camp. Not only is it played out some of the World's toughest courses, but it also brings out a tremendous competitive edge that only



How much more do I have to endure?

playing for your country can provide.

So, out comes computer Ryder Golf with such headlines on the box as 'Ryder Cup plays with startling speed

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It's hardly worth thinking up another caption for such a dull game.



Not sure about a birdie; it's certainly a turkey.

and detail so real you can almost smell the grass'. This looks promising.

The promise however doesn't last very long. Actually, it lasts as long as it takes to load up the first hole, but more about that later.

Graphically the game looks impressive, great loading and menu screens and a choice of four courses to play. You get to pick your teams and playing alongside Nick Faldo has always been one of my ambitions. So Nick it is for my partner. The competition itself is matchplay (you count the holes you win, not your overall shots) and lasts for three days, using a combination of fourball play, (where two team members are partners and the best score of the two counts) and Foursomes, (the partnership only plays one ball and takes alternate shots). The last day is Singles, where each player is up against an opponent head to head. The winning team gets 1 point

each match, and 1/2 a point for a draw.

Nick and I came to the first tee, playing Tom Watson and Payne Stewart and it was me to tee off first. Picking the direction I wanted I was ready to swing. What happens next after this glorious build up is that a familiar wobbling ball appears with a cross hair and I press fire and...it's all horribly familiar. Yes folks, apart from some superb window dressing, the Collectors' Item is readily available yet again for everyone.

Ryder Cup is a huge disappointment and an absolute turkey. You don't want to be within 10p of it. Stick with PGA Tour or Microprose Golf for the purists or better still wait for the Sensi Golf, it's bound to be brilliant.



Where is the quit to DOS option? It's the best one.

VERDICT

Graphics:	82%
Sound:	70%
Gameplay:	12%
Overall:	15%

Banshee

A1200 Core Design £25.99

Had Core made any effort at all to hide the fact that Banshee is an update of the old arcade game 1942, it might have been possible to criticise them for it. However, the game even contains the same type of sprites, at least on the early levels.

For those who missed 1942, Banshee is a vertical scrolling shoot 'em up. As the screen moves you along, enemy planes dive at you from all angles and it's up to you to deal with wave after wave. The planes differ in size, strength and attack capability and some release the inevitable and much sought after power ups.

While all this is going on, the enemy ground troops are not sitting

quietly. They too are out to make a dent or two in your fuselage.

It's very easy to summarise then - shoot all the planes, helicopters, troops, boats, submarines, tanks, gun turrets and troop carriers you see. Oh, and the lighthouses - they contain power ups too.

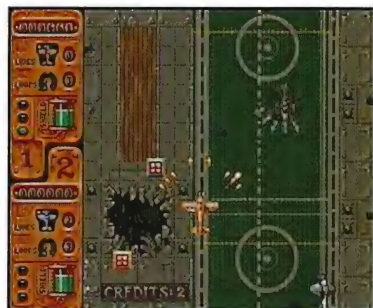
As the level progresses, you'll encounter the mid level bad guy and eventually the end of level nutter. Tact and stealth are required to overcome these subtle creatures. Only kidding, shoot the crap out of them as well.

Level four of the game is where you zap off to the enemy's home planet (there is a sort of plot, you see) and play a level in a spaceship. Why not?

The game can be played by



Shoot everything in sight and power up the plane.



Two players can join the frantic action at once.



The first mid-level guys are simple enough to deal with, even if they are eight times my size.

one or two players simultaneously and is not an easy task even with a friend. There are three levels of difficulty, but it's hard to tell much difference between the two harder ones and the easy one will only let you play the first two levels.

The power ups are diverse and allow you to collect a respectable arsenal, but die and you could end up with no hope. The firepower strength can be increased and the spread of its fire altered. There is a special bomb, that devastates large areas of the ground and a smart bomb that takes out anything on the screen. Homing missiles are also available as are extra lives and regeneration kits.

The other trick that your fighter can do is loop the loop, which will make

it invulnerable for a small period of time. You only have a few of these, although more can be collected, so it's wise to be stingy.

Banshee is a great shoot 'em up and the best of its kind so far on the Amiga. At last, I can leave Xenon 2 alone.

VERDICT

Graphics:	84%
Sound:	73%
Gameplay:	90%
Overall:	88%

The Ultimate Pinball Quest

Infogrames £29.99

With 21st Century, the champions of Amiga pinball, working on a platform game, it's refreshing to see someone else have a bash at this genre. It also means that I get to play pinball at work again.

Pinball Quest takes the welcome departure from reality that I have always said was the way forward for pinball sims.

Why is Speedball 2 so good?



Heavy Metal is a fast table, but where the heavy metal music?

Because it takes football into the realm that we can't really experience, unless you play for Chelsea.

Pinball Quest works on the same principle - take the pinball game



Is calling a table "Wasteland" a way out of putting anything interesting on it or is someone a fan of T.S.Eliot?

and defy the laws of nature.

What's so different? Well, for starters, the tables stretch on for miles. As you reach the top of one table, it's possible to flip the ball into the next area and continue to climb the tables. Of course, you can let it slip all the way

back down to the original table, which is a pain in the proverbials.

There are also bonus levels, where the ball is flipped around to shoot at things.

These are the plus points of the game and very worthwhile they are too. The downside is that the tables are quite bland and there is still no way for multiball. It would be better had there been a few more features built in and had the backdrops not been so colourless.

There are three options: adventure, arcade and bonus. The adventure option allows you to play you're way through the levels, whilst the other two let you practice the tables and the bonus levels respectively.

The bottom line is that Pinball Fantasies looks much better, but doesn't have the twists that Pinball Quest has. If you're a pinball freak, you'll be content.



One of the bonus levels - just don't let the ball down and you'll be OK.

VERDICT

Graphics:	70%
Sound:	70%
Gameplay:	85%
Overall:	80%

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"Football is not a matter of life and death it's more important than that."
Bill Shankly

"I've never flinched from taking a risk, but at times it's sensible to accept that you can't have what you either way."
Terry Venables

"I'm going to make a prediction - it could go either way."
Ron Atkinson

English and Italian Leagues

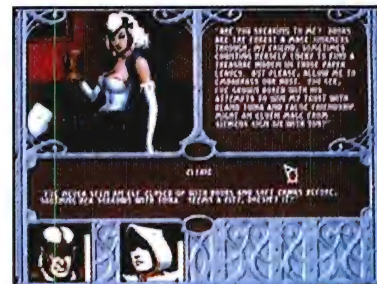


Published by Summit Software. Program copyright © Summit Software 1994. Screen Shots taken from the Amiga Version

RAVENLOFT

US Gold

Here are some sneak preview pics of a new D&D release from US Gold, Ravenloft. In true Gothic horror tradition, this one has some dynamic lighting, some mean monsters and some intense dungeon delving. Taking place both outside and in, Ravenloft has all the hallmarks of a quality RPG.



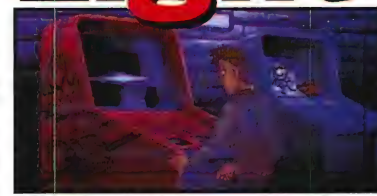
Preview

Vital Light

Millenium

Hmm. Millenium have labelled this a "space age shoot 'em up." Frankly, I can't see any reason to call it anything of the sort; it's a puzzle game, almost in the vein of Tetris.

To try to convince us otherwise, there is an elaborate plot and a sparkling intro. A few heads pop up and witter some inane conversation, which gives you time to say "Ooh, doesn't that look like the Bitmap Brothers' style." When you get past this nonsense, it's easy to forget that you're playing the part of some guy who lives in a computer and it's life or death. (Where have we seen that plot before?)



A shot from the nicely animated, though short and largely irrelevant intro.

With all the dressings making it seep quality, you're hyped up for some frantic action. It's a bit of a disappointment when you find that you have to fiddle around changing block colours as they drop from the sky.

You have a certain limit to each colour and so have to swap between colours and match it up. There are two shades of each colour and the blocks only disappear when the shades match.



Make all the blocks the same colour and they'll blow up and you're onto another level.

The gameplay is quite addictive, but the graphics in the game itself are not awesome. There's no way for them to be - it's a set of blocks. The sound is minimal and I thought that a few of the samples were not top notch.

The gameplay does save the game from doom but I hope it's not going to be too highly priced, because people will stick to a game of PD Tetris. It exercises the same brain cells.



Er? Make all the blocks the same colour and they'll blow up and you're onto another level.

But only you know how to construct the T9000.



Evil's afoot!! The Crash dummies better get themselves in gear.

THE INCREDIBLE CRASH DUMMIES

Virgin £29.95

Now this is a game that suits me down to the ground. Why? Because these guys just don't know when to give up. On and on they go losing an arm, losing their legs, crawling, if they have to until there's literally nothing left of them! I have to confess, that there is something hypnotically morbid about watching these dummies wander about the screen armless or legless and that is just what the hook is about this one. Of course, as with all Virgin releases, there is a quality about the whole thing, a kind of confident swagger that only a company brimming with successes like Virgin can bring to a game.

Crash Dummies is essentially a platform game. There is a loose plot concerning them rescuing their chief car tester from the evil clutches of your common or garden baddie. This gives us a glorious excuse to wander around all the levels of the car factory avoiding all manner of pointy things and heavy loads in order to collect those funny little disc things that you see on the sides of real dummies. Getting hit by anything causes your dummy to lose a limb of some sort. Don't worry though,

by collecting screwdrivers dotted about you can make running (or hopping) repairs.

If I were being brutally honest, there really isn't anything in this game that your professional platform player hasn't seen before. Once you've finished Zool or Cool Spot, what is there left to beat? But Crash Dummies IS well made, it has some stirring music and a cute style of its own (it's that morbid fascination coming back).

One thing's for sure; if you are just into platform games, The Dummies won't let you down. Although after a while you might want to get legless with them!!

VERDICT

Graphics:	72%
Sound:	61%
Gameplay:	67%
Overall:	67%

INSIGHT DINOSAURS

INSIGHT:DINOSAURS is the second title in the INSIGHT series, a lavishly produced title rich in multimedia. You can be assured INSIGHT:Dinosaurs will be visually stunning and technically correct as the title is being produced in association with the British Natural History Museum, one of the world's foremost centres of excellence in the field of paleontology. A unique title for the whole family, produced in a concise, easy to read style which allows it to be used for reference and browsing alike.



A comprehensive A-Z section gives in depth information on the best known dinosaurs from Allosaurus to Velociraptor.

Life of the Dinosaurs covers Anatomy, Attack And Defense, Herbivores, Carnivores, Climate, Pack Hunters, Lone Hunters, Herds, Scavengers, Descendants and much more.

World of the Dinosaurs covers Death Of The Dinosaurs, Shifting Continents, Family Tree, Fossil Hunters and Hunting and much more.



DINO SAW is a chinese jigsaw with 25 different dinosaur puzzles

DINO PAINT is a simple to use children's colouring book with 25 pages for you to colour.

DINO QUIZ is a multimedia quiz for one or two players with questions on all aspects of Dinosaurs.

TEXT - Comprehensive text coverage

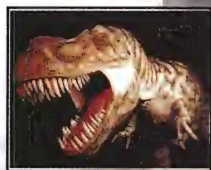
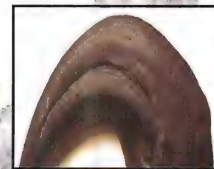
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GRAPHICS AND ANIMATIONS - Computer generated 2D and 3D animations bring to life the world of the Dinosaurs.

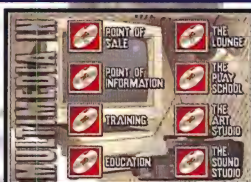
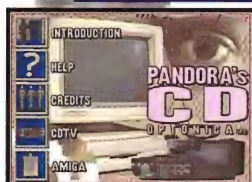
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My hangar is not exactly bursting to the seams with resources.

As soon as somebody decides to create a war simulation where you control both ground and air forces (in other words, combine a tank and flight sim and throw in a bit of tactical stuff), you get suspicious. It's always been a case of a game that turns out to be a jack of all trades.

Armour-Geddon 2 is a refreshing change.

To begin with, it's necessary to spread your resources around and create your forces. Then, with the tanks and planes ready, go out and take on

Armour-Geddon II

Psygnosis £25.99

the bad guys, who, incidentally, are trying to recover the "Hellfire" satellite. As you can guess, if they succeed, then you can kiss civilisation good-bye.

Once you launch your task force, it's up to you to switch between control of the land and air and ensure they don't get themselves killed.

The controls are quite easy to get to grips with, but making your way to specific coordinates is no easy matter. I kept overshooting the point.

The flight sim is nowhere near as complicated as some of the Microprose simulations, it is easy to get into and fun to play.

Exactly the same is true of the land attack section.

The only real downpoint is the

control of the weapons section, which is rather limited. On the ground, and I admit this is intentional, it's only a case of shifting the gun barrel around and up and down until you hit on the right way and although that's fine for ground targets, I was just lucky if I hit the planes. I actually got quite a good hit ratio for taking out the aircraft; I just never figured out exactly how I was doing it.

On the tactical side, you have a few boffins, who you set to work creating better ways for you to blow up the enemy. Marvellous.

Armour-Geddon 2 is one of the first combination sims that works. It is not overly-complicated and concentrates more on playability than



I'm just out for a jaunt in my Heavy Tank.

it does on realistic simulation. It will keep you occupied for quite some time.

VERDICT

Graphics:	80%
Sound:	75%
Gameplay:	86%
Overall:	84%

APIDYA

Team 17 £10.99



I think bug spray would be the best way of cleaning up this garden.

Perhaps one of the reasons that we don't see a great number of shoot 'em ups appearing is not that they are unpopular, but more that it's hard to make them original.

Apidya is a budget re-release of one of the better shoot 'em ups of late. The setting is novel – you play a bloke transformed into a bee out to rid the world of evil insects. Not a unique idea though, since Psygnosis did similar things with the visually and aurally excellent Agony.

Apidya stands out not for any originality – as I said there is very little that can be done to make them original, even ever power up has been used before by now – but for its great playability. It is simply a well produced shoot 'em up.

Fly along and shoot everything. Collect the flower bonuses and you can increase your firepower. The power ups range from speed up to bombs and multiple shots.

There are the mid and end of level guardians as you'd expect. One thing that should be said is that Apidya is a real challenge. Don't expect an



I'm surprised that bees can fly underwater.

easy ride. If you die, expect trouble, because you will lose some of your power ups and if you're in a tricky place – and Apidya consists of tricky places – then it will all be downhill to the Continue option.

At the budget price, Apidya is a must for shoot 'em up fans.

VERDICT

Graphics:	81%
Sound:	70%
Gameplay:	92%
Overall:	90%

Archer Maclean's Pool

Hit Squad £14.99

Last month saw Team 17 have a crack at the pool game. Very good it was too.

This version came out a while ago and is more or less Jimmy White's Snooker converted to the rules of pool. In fact, that's exactly what it is.

There are lots of options and it takes time to plan a good shot. The shot is viewed in 3D, as if you were playing the real game. It's smooth and well animated, although if you don't make a shot quick enough, the computer decides to play it cute and show a selection of 'humorous' sequences, such as flies buzzing around the table. Ha, ha.



The table can be seen as whole to give you the idea.



Your shots are taken from this angle.

Still, a damn fine game. It's a pity, though, that £15 is now classified as budget. That's inflation for you. Hang on, I thought we'd got rid of that?

VERDICT

Graphics:	87%
Sound:	73%
Gameplay:	85%
Overall:	80%

European Football Champ

Hit Squad £12.99

Even the re-releases are taking advantage of World Cup year. This one is a conversion from the coin op that kept me occupied two years ago. As they go, this is a pretty faithful conversion.



It's a game of football on the computer. How original.

It's very fun play, but couldn't rival the likes of Sensi Soccer for accuracy. It's viewed from the side and it's easy to see which player is doing what.

There was one point where I'm convinced that I fouled the ref, so that impressed me. Especially since I didn't get booked!

This isn't a game for the 'serious' football fanatic, but it's ideal for the casual

player. £12.99 is maybe a few pounds too much, but there are much worse games being flogged for £30.

VERDICT

Graphics:	75%
Sound:	70%
Gameplay:	78%
Overall:	75%

HITS FOR SIX

Volume 6

Prism Leisure £25.99

Not a bad bundle, this volume contains some good games. **Silent Service 2** is a great submarine simulation. Whether it's accurate or not – sorry,



It's the bit where you drive in Maya. Not adrenaline pumping.

I've never been in a WW2 sub. It is fun though.

There is a game called **Maya**, which I've got to talk about. It's been translated (from French, I think) and declares proudly that the game



I got beaten up. I'll never find the secret fetish.

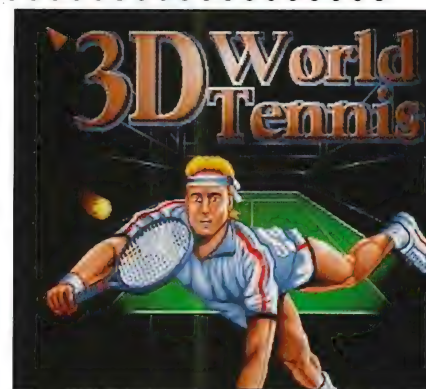
concerns a mysterious fetish. You've just got to find out, really, don't you? While you do, it's a case of some simple fights and banal driving.

3D Tennis is well presented and superior to the tennis game in Volume 8 (see below).

Stormlord is a platform beat 'em up that isn't as bad as I was expecting. There have been worse, though, thankfully, not recently. It's a budget re-release.

World Cricket is a management simulator and quite enjoyable. You could easily enjoy this game. There's no actually playing as in later cricket games, but the simple management isn't awful.

There is also a football game in here (perhaps to encourage you as it's World Cup year), but I don't think we should say very much about it.



The better game of Tennis from these volumes has a good front end.

VERDICT

Overall: 76%

Volume 7

Prism Leisure £25.99

Special Forces is a complex battle sim. You'll need to form teams and explore the terrain and exploit the individual skills of team members. It's a very absorbing game and mixes action and strategy well.

3D World Boxing should be condemned for using such a vicious sport, but I don't care, because I'm not silly enough to get into a real ring. I



Ah, the smell of fresh sea air. Perhaps not.



A puzzle game that can still pass the time.

prefer sitting waggling my joystick about.

Windsurf Willy and **Blade Warrior** stink. The former is a pain to control and not worth the effort and the latter uses silhouettes.

I'm not convinced this is to set a mood or create atmosphere. I think it's just for cheap graphics.

Nebulus was a popular game and will probably still keep the odd platform lover happy.

Really though, it's £26 for two and half games and I'm not sure I'd buy any of them. Maybe Special Forces if it was dirt cheap. There are better, more recent games that would be more worth the money.

VERDICT

Overall: 68%

Volume 8

Prism Leisure £25.99

As with the rest, this volume has a mixed bunch. The top one, which they rightly give over most of the cover to, is **Railroad Tycoon**. This game is created by Sid Meier, who went on to conceive the superb **Civilisation**. If you played that, then you will see the



Just starting my new empire.



There are quite a few parameters to this game.

striking similarities immediately. The game seems to run from the same engine and has pretty much the same layout. The aim here is to create a successful railroad company.

Railroad Tycoon is not an easy game to get to grips with, like its successor **Civilisation**, but it is more

than worth the effort. Once you've started, then you'll not want to stop and with four levels of difficulty, you won't have to for quite some time.

A brilliant sim.

The next best in this box is **International Tennis**. It was, as I remember, quite successful and impressed some people a few years ago. Things have moved on in sports sims since then. I wouldn't play this more than a few times, but I'm not a great lover of the real game. You aren't going to be amazed by it whatever, but it may make a fun change from time to time.

Targhan is a hack and slash game that has felt the weight of time. It's OK, but you will finish it and you may feel the need to vent your anger in some other way after you've suffered the loading times.

Big Game Fishing. Hmm. (That's the best review I can give it!) Netherworld has really awful graphics



Love? Not really. I'd rather have the strawberries and cream.

and please, please don't load **Football Manager World Cup Edition**. You'll cry.

Maybe you can still pick up the budget version of **Railroad Tycoon** by itself.

VERDICT

Overall: 70%

PROGRAMMING TIPS

A 'timely' reminder from Paul Overaa about how time delays are created within Amiga programs.

Most programmers find it necessary occasionally to create delays in their programs and the number one rule as far as Amiga coding is concerned is that you should never use delay loops for doing this. On the multitasking Amiga a delay loop would result in the processor wasting its time whizzing around a loop that does nothing, when that time could be being used to run other system and applications programs.

So, delay loops are definitely a no-go. Instead the idea is to put your program to sleep for the duration of the time delay so that the processor can do other things and there are a number of ways in which this can be done. For non time critical delays there is a DOS library Delay() function that can be used. This lets you specify a delay in terms of a given number of 'ticks' (50 ticks = 1 second). Alternatively you could ask for Intuition 'Intuitick' messages to be sent to your program. These sort of approaches are fine for doing things such as displaying an error message for a couple of seconds and so on but if you need to create very accurate time delays then a more sophisticated approach is required. It is of course possible to hit the hardware directly and take over the CIA timers but this is rarely necessary because in most cases the use of the Amiga's timer device will provide more than sufficient accuracy.

Timer device use follows the same broad plan as any other device and involves setting up a reply port and a request block before opening the device. The basic steps in order are as follows: Use CreatePort(), or the equivalent Exec library function, to create a reply port for the device to send its messages to. Allocate and initialise a suitable device I/O request structure by using CreateExtIO() (or again the equivalent Exec function). The bare bones code might look something like this...

```
g_timer_reply_port_p=CreatePort(TIMERNAME,0);
g_timer_request_p=(struct timerequest *)
CreateExtIO(g_timer_reply_port_p,sizeof(struct
timerequest))
```

although in practice you should check the returned pointers to ensure that each call was successful. Having done that you'd open the device using an OpenDevice() call...

```
if((OpenDevice(TIMERNAME,UNIT_MICROHZ,
(struct IORequest *)g_timer_request_p,0))!=NULL)
error_number=STARTUP_ERROR;
```

After that you are free to use the device for as long as required via any standard or non-standard device

calls which are available. There are a number of Exec functions responsible for interfacing I/O requests but most people will find the Exec function DoIO() suitable for their delay needs and, if you want short accurate delays, I'd recommend setting the timer device up in what's called UNIT_MICROHZ mode using a TR_ADDREQUEST command coupled to a DoIO() call. This results in the timer device waiting for the specified time period before replying to the time interval request. Before making such a time request you need to set the command field of the I/O request to TR_ADDREQUEST which you can either do either immediately you've got the device up and running or, if you are using other timer device commands in the meantime, as part of a separate 'SetTimer' function. Here's one routine which I regularly use to create short delays...

```
void SetTimer(ULONG seconds, ULONG
microseconds)
{
g_timer_request_p-
```

```
>tr_node.io_Command=TR_ADDREQUEST;
g_timer_request_p->tr_time.tv_secs=seconds;
g_timer_request_p-
>tr_time.tv_micro=microseconds;
DoIO((struct IORequest *)g_timer_request_p);
}
```

Basically we just set up the command field and delay values then pass the timer request to the timer device using the Exec DoIO() function. When finished with the timer you do of course have to hand everything back to the system. This means closing the device using the CloseDevice() function, deleting the I/O request structure using DeleteExtIO() and deleting the reply port using DeletePort() (or the equivalent Exec functions). Setting up a timer device may sound a bit of a pain but luckily once the device is up and running sending commands to it is easy, so it is worth persevering with the coding issues until you are happy with the overall ideas. Next month I'll outline a few other timer device related points and give you some runnable code on disk that will show you how everything fits together! **AUI**

Function Name: OpenDevice()
Description: This function opens the specified device unit (completing any further initialisation of the request block as it does so).
Call Format: error=OpenDevice(name_p, unit, io_request_p, flags);
C Prototype: BYTE OpenDevice(char *, ULONG, struct IORequest *, ULONG); **Registers:** D0 OpenDevice(A0, D0, A1, D1)
Arguments: name_p - pointer to device name
unit - unit number of the device to open
io_request_p - pointer to a request block
flags - additional info (device specific)
Return Value: error - success/failure indicator

Notes: When specifying a device name you should bear in mind that Exec filenames are case sensitive!

Listing 1

Function Name: DoIO()
Description: This initiates an I/O request and waits for it to complete. In other words it performs synchronous I/O.
Call Format: error=DoIO(io_request_p);
C Prototype: BYTE DoIO(struct IORequest *);
Registers: D0 DoIO(A1) **Arguments:** io_request_p - pointer to an initialized I/O request block
Return Value: error - NULL if operation was successful otherwise the returned value is a (device specific) error number.
Notes: This function asks the device driver to perform the requested I/O operation and then waits until the operation is complete (it will try to use quick I/O if possible).

Listing 2

AMIGA DISKS AND DRIVES

The way that Paul Overaa approaches this key area of Amiga activity is to assume that even if we have been using the Amiga, and of course its disks and drives for some time there is still something we can learn. And he is right. For this book will benefit both beginners - and they will learn a tremendous amount from the very simple explanations of quite complex ideas and also easy-to-follow instructions on all the basic needs they might have.

For the more experienced user, Paul Overaa has plenty of information that can be useful.

The book aims to do several things:

- to instruct you simply on how to use and care for disks and disk drives so as to minimise the risk of potential problems.

- to explain those parts of the Amiga's disk operating system that are connected with disk use.

- to ensure that you know what can be done to minimise the loss of potentially valuable information.
- to provide some information about

The prolific technoace of AUI, Paul Overaa has been burning the midnight oil with his w/p program working overtime (Overaa-time?). Amiga Disks and Drives, his latest book, is a top notch production, says Jeannie Lawrence

how to recover data if the disks or files become damaged.

The book leads with material written for the novice user who wants to learn about the computer and covers subjects such as accessing floppy disks, moving and copying files, installing new software, working with a hard drive, creating new drawers/directories and organising data. The subject is dealt with from both the Workbench and AmigaDOS angles.

It's all very clearly and simply put and would be a useful set of hints

for anyone starting out in the use of the Amiga or feeling a need to understand just what goes on and how to deal with it.

As well as explaining how the computer works, the book also recommends the best methods of dealing with: choosing and installing equipment; do's and don'ts of disk handling; using the filing system; Workbench and AmigaDOS operations; automation with script files; compression techniques and archiving utilities; viruses; data security; encryption schemes;

using PC, Atari ST and other format files, graphics and music conversion - which is not surprising as Paul Overaa is also a professional musician.

It goes on to cover installing software; technical aspects of the filing system and that dreaded but very necessary aspect, disk errors and recovery.

The whole book is well-written, easy-to-read and follow and gives you all the information you could need. What more could you want? Score? 100% of course.

This book is part of the Insider Guide series from Bruce Smith Books which is to be commended for the presentation of this increasingly and deservedly popular series. **AUI**

INFO

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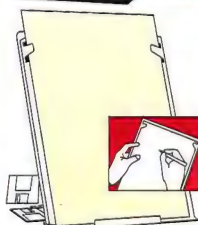
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ARexx

So much is written about ARexx's inter-program communications facilities that at times it's easy to forget that ARexx can also be used just as effectively as a conventional high-level programming language in much the same way as Basic. Perhaps the most important point in this is that ARexx provides sophisticated file handling facilities which means it is possible to read and edit files created by any program. One obvious possibility here is that anyone who uses a non-ARexx text editor that writes ASCII text files could create a set of programs to perform automatic editing thus providing exactly the same file manipulation facilities as a corresponding ARexx controlled editor. Similarly a user might create customised file display routines that could be used to search for key-words and display and/or print the contents of particular files of interest. To do this you need to know about ARexx's file handling facilities and that is what the next two months' articles will explain.

ARexx File Handling

ARexx provides a range of high level functions that allow files to be opened, written to or read from and then closed. Files can be referenced by easy-to-use labels called 'file handles' and once a file is open all subsequent read, write and close operations are done using this 'handle' rather than the full name of the file. A file handle is just an identification string and may be

INFO

Paul Overaa explains how simple file handling scripts can give the benefits of ARexx to even those without ARexx interfaces.

either a variable which represents a string or a static definition. How do you open a file? It's easy, you use this built in ARexx Open() function.

Files opened using write mode are always considered as new, empty, files and so opening an existing file using this mode will result in any data the file previously contained being lost. Read and append modes are closely related and differ primarily as with read mode the associated internal file-position pointer is positioned at the start of the file, whereas in append mode it is positioned at the end of the file (ready to add, i.e. append, new data to the end of the file). If the Open() function successfully opens the specified file it will return a Boolean 'true' value (1). If the function fails a Boolean 'false' value (0) will be returned (before use files should be checked to ensure that they were successfully opened).

File closing is equally easy and

is performed using the ARexx Close() function. Most programmers, because they ensure that they only attempt to close files that have been successfully opened in the first place, will use an explicit 'call' instruction to close the file and will not test the returned value for success.

Strictly speaking the use of Close() is unnecessary - because ARexx actually closes all open files automatically when a script terminates. With most other languages relying on the language itself to do these types of 'cleaning up' operations is regarded as bad programming practice so I'd recommend that you explicitly close all files that you open just to make sure that you don't get out of the habit of doing so in general.

Reading Characters

There are two main functions that you need to know about, Readch() and

Readln(). Readch() reads a specified number of characters from a file like this:

```
string$=Readch(filehandle,
```

```
length)whereas Readln() is line oriented, i.e. it reads characters until it finds a newline character (although the newline however is NOT included in the returned data). The function call takes this form: string$=Readln(filehandle)You also need to be able to tell when you've read all the data in a file and this is done using the ARexx EOF() function. In the example script I've coupled the EOF test to the file reading loop using the logical NOT operator (~) but in general programs can check for an end of file condition like this:
```

```
result=EOF(filehandle)If the returned
```

```
Boolean result is 1 (ie true) then the end of the file has been reached otherwise the end of the file has not been reached.
```

An Example Script

In this month's example a file is opened for reading and a loop used to collect each line of the file for display. For practice try running the script and using it to display any text files that you have lying around then next month we'll take things a little further! **AUI**

```
success=Open(filehandle, filename [,mode])
```

where...

filehandle	- a string which, if the operation is successful, becomes the valid file handle for the open file.
filename	- is the name of the file to be opened.
mode	- is an optional parameter which defaults to 'r' (read), but may be explicitly set to either 'r' (read), 'w' (write), or 'a' (append).

Listing 1

```
/* An example file reading script */
```

```
say 'which file'
```

```
pull filename$
```

```
if Open(source_file, filename$, 'r') then
```

```
do
```

```
do while ~EOF(source_file) line$=Readln(source_file)
```

```
say line$
```

```
end
```

```
call Close(source_file)
```

```
end
```

```
else say 'sorry - cannot find this file!'
```

Listing 2

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A new training video from the Burgess Video Group, "Adorage Professional Video Effects" dropped on my desk the other day and as I'd never used Adorage before, I decided to put it to the ultimate test. Borrowing a copy of the program, but no manual, I proceeded to learn the program from the video. Adorage has a unique operating system so it's not possible easily to transfer knowledge from other programs.

The first two or three units of the tutorial passed effortlessly, but then a few hiccups occurred. At one point (and again, later) it was not explained how to get to the next screen. Following the tutorial exactly, there were some occasions when I inexplicably found myself with a screen different to that on the video. Worst of all, there were a couple of bad ('jump') edits in the video.

But by rewinding the tape, making a few calculated guesses and using trial and error - it was not difficult to overcome these small problems. Otherwise, the video was most successful in leading me through a number of the effects possible with Adorage, and I'm sure that good tutorial videos are an ideal way of learning new computer programs. Though maybe an interactive CD video disc would be even better.

When I did make mistakes, following the video, it was frustrating having to start the tutorial from the beginning again. The 'save' procedure for Adorage should have been covered early on in the video, but, in fact, wasn't covered at all. It would also have helped if I'd been told at the beginning to ensure that all the pictures I intended using had to be in exactly the same format, otherwise it was back to square one again!

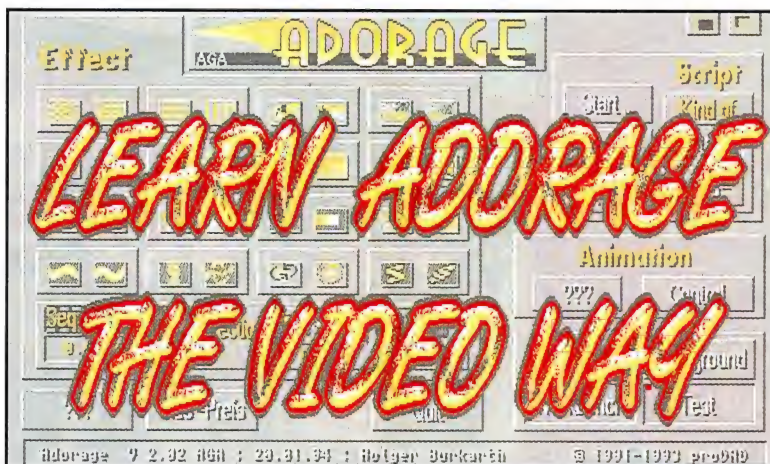
At the end of the tutorial many effects are shown, accompanied by music, and it would have been convenient to have known at which effects



Goldstar remote control displaying all the options.

THE VIDEO COLUMN

Alan Puzey keeps you in the picture.



A video tutorial to help you create brilliant effects.

(and parameters) we were looking. This ending also gave the feeling that the video fell between a training aid and one advertising Adorage.

Much preferring this approach to reading (I nearly said "ploughing through!") manuals, I consider that this

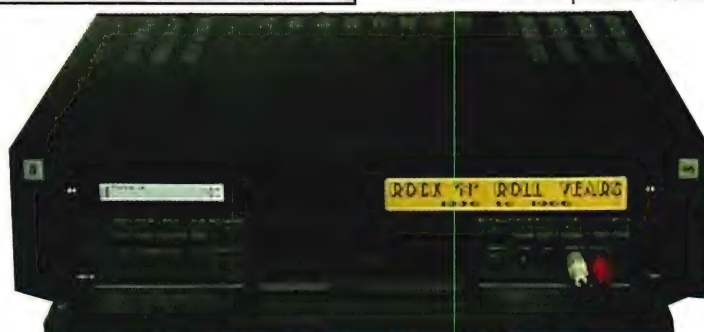
an 8mm camcorder and want to edit your material, but not too seriously. It also provides you with an additional high-quality VHS recorder.

Both formats are front loading and the machine is hardly larger than a conventional VCR. All the normal functions (setting the clock, channel tuning, timer recording, etc) you would expect on a consumer recorder are present and all setting-up procedures and other aspects of recording are conducted using on-screen menus. The Gold-Star features a Title Generator, but you'll probably prefer to use your Amiga for quality and variety.

I particularly liked the ease of use, with all aspects managed by a remote controller that looks more like a CD32 than a conventional video remote. The still picture was superb and rock-steady on both VHS and 8mm, making it an ideal machine from which to digitize. Equally useful was the variable slow-motion facility on the VHS deck.

For those of you with a Rombo Vidi digitizer, one of the few complaints is that it only captures a frame approximately every two seconds when continuously grabbing images from video tape. A useful tip - if you have a machine such as the GoldStar, with distortion-free slow motion - is to grab images while the VCR is playing back in this mode. The result is a far less jerky animation approaching full motion video.

The quality of editing from 8mm to VHS is very good, with distortion-free edit points, but the accuracy of editing is limited by your ability to 'hit the button' at the precise moment. It



Goldstar's double deck VCR.

video certainly succeeds with its coverage of Adorage effects. If it had only spent another ten minutes covering additional aspects of the program, it would have been excellent.

The Adorage video costs £14.99 from Burgess Video Group Unit 6-8, Industrial Estate, Brecon, Powys LD3 8LA telephone 0874 611 633 for further details.

Goldstar VCR

I've recently been testing an interesting new video cassette recorder from GoldStar, the R-DD101. This model combines a well equipped VHS recorder and 8mm player. It is a sort of 'compromise' recorder that could well be worth looking at - if you already use

cannot be considered professional or prosumer equipment and is not priced as such, but it still could suit many people's purposes.

The GoldStar R-DD101 is available from Tecno, Retail Ltd, Unit 9, Hampton Farm Industrial Estate, Seltham, Middx TW13 6DB at £599. For further information, contact Andy McCormack on 081 898 2772.

Holmer's Bronze

Geoff Harmer, whose work on the Amiga was featured in a recent issue of AUI has won the Bronze Seal in this year's Institute of Amateur Cinematographers Movie Competition. Well done, Geoff, and may the Amiga help you to a Gold Seal next time! AUI

THE PD STAKEOUT

Scoring

The marks awarded to each PD disk are based purely upon its own merits and, of course, our personal views. Value for money and reliability are also taken into account as well as features and quality of the software.

Compatibility

The PD disks reviewed in this issue were tested on an A500 with Kickstart 1.3, an A500+, an A1200 and an A3000. However, please check with your PD supplier that the disks you are ordering are compatible with your Amiga.

PD or ShareWare?

All freely distributable software comes under the rather deceiving umbrella of "public domain". Quite a lot of this software is, in fact, shareware. Shareware means that if you like the software, or use it regularly, the author will request a reasonable donation from £5 to £20. There is usually a note on the disk informing you if the software is shareware or regular PD. Whether or not you send a donation to the author depends totally upon your level of conscience and morals. Remember, if you send a donation to the author, you may receive an updated version of the software. Even if you don't receive an update, you will have given the author the incentive to continue contributing into the public domain.

ZAM 94

Disk 01034
KEW=II

Why didn't anybody think of an Interactive magazine before now? (Well, we did! About three years ago! And what about Amiga CD!? ED) ZAM is such a magazine and looks at first glance like every other doing the rounds at the moment. The difference is that you can reply to any of the articles via

the built in word processor. This is very primitive but it does the job. When you have finished your comments, they are saved onto the disk.

You don't have to add comments to every article but when you feel you have made enough of a contribution all you do is mail it to the address in the

mag and your comments will appear next month along with everybody else's. An excellent idea, and I do hope it is a successful one.

75%

Obliteratives



Disk F1012
F1 Licenceware

I think this game is quite original. It was designed as a two player game but this is optional. The environmentalists among you will probably enjoy it more than the rest of us. This is because the

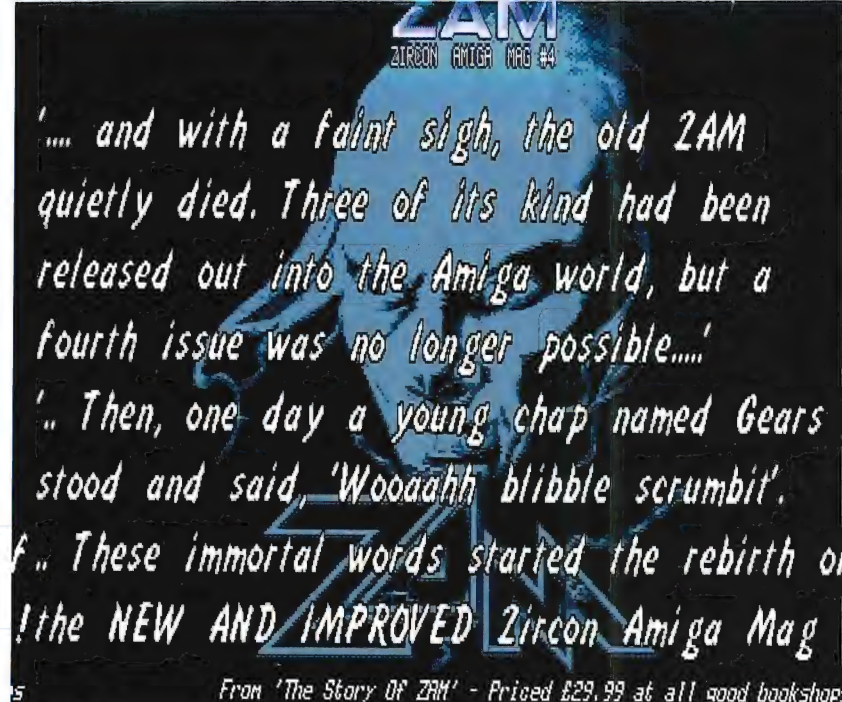
theme of the game is the destruction of a huge factory polluting the surroundings.

The object of the game is to guide your small hovercraft through

the water around an island on which the factory is sited. You have to avoid a homing sight which is either controlled by the second player, or the computer. If you let the crosshair get on top of you then it's bye bye, Greenpeacer. Hey, I didn't know you could blow up environmentalists! Well, in a game anything is possible.

Your job is to steer your own crosshair towards a number of beacons lying in the water. This is difficult as you first have to avoid the enemy's lock on you, and secondly you are always moving, so lining the target up takes some getting used to. After you have destroyed enough beacons, the factory's defences come down for a short time. This is when you have the opportunity to hit it with one of your missiles. You then repeat the process until it is destroyed. It is good fun to play with a friend, but against the computer it is quite difficult.

80%





AMOSzine Issue 1

F1 Licenceware

AMOSzine is not only written in AMOS, it is for people who program in it. So if you are not a programmer and a fan of AMOS, steer clear. The magazine is sponsored by F1 Licenceware and will cost you £2.25. There is a good range of articles, all AMOS related (well, what else did you expect?) and.. well, not much else really. One item features articles taken from different magazines of F1 Licenceware products. I was surprised to see one of mine in there for the game Fortress.

60%



Handy Software

I remember a game like this on the BBC computer way back in the eighties. Perhaps it was called Pengo but I do know that it involved pushing blocks of ice around and crushing small creatures. In this particular version you are again a penguin and have got yourself stuck in the north pole. Your goal is to get back to the Antarctic.

There are 10 different locations to battle through, each consisting of 5

levels. You can, of course, still push the blocks of ice along to crush the baddies who are after you, but the aim of the game is to align diamonds which also are scattered around. It is superbly programmed and the author should seriously consider creating commercial titles.

90%

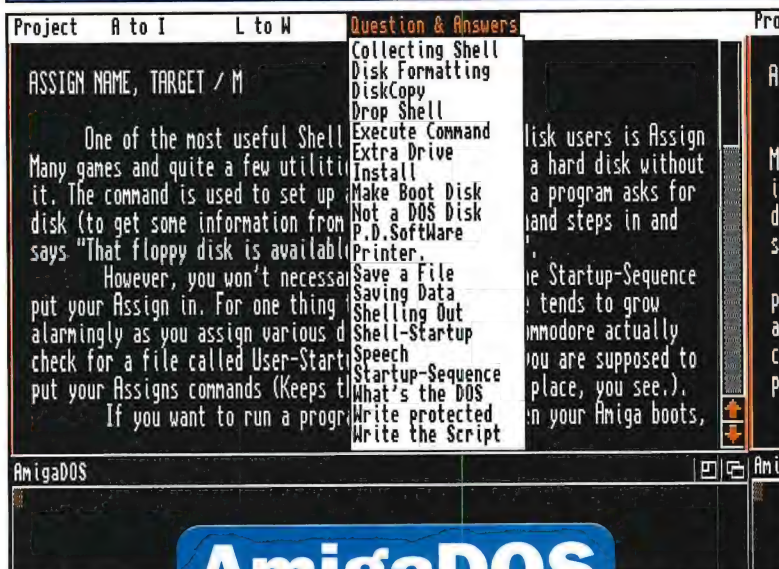
The States of Europe

Disk F1027 F1 Licenceware

As Europe seems to be changing all the time it was a good idea to release this disk. It contains 48 nation fact files containing vital information about each one. Gold Disk's Hyperbook was used to good effect to bring you the graphics and text. As well as the info on each country, there are a number of top 10 lists. This includes such information as the most richest and most populated countries in Europe. It was quite

depressing to learn firstly, that Britain was not in the top ten for the richest country, and secondly that we were one of the most populated countries in Europe. Anyway, enough of the doom and gloom, if you are interested in learning more about Europe you can do a lot worse than buy this disk.

83%



AmigaDOS

Disk 3124 17 Bit

85%

Have you recently bought an Amiga and are having difficulty with the DOS? You are? Then read on... This excellent program written in the underated CanDo is both helpful and informative. It contains help on every AmigaDOS command,

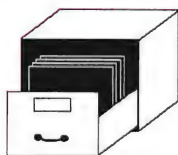
and along with the explanation there are some examples. There are also a number of most frequently asked questions answered. These range from, how do I save a file? to What is PD? No beginner should be without this disk.

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Team Focus



Disk OS045 Roberta Smith

This disk will only appeal to one type of person, A Tottenham Hotspur fan. It is programed very simply in AMOS and it controlled via the mouse. There is information about the club, which trophies it has won over the years, when it was formed etc. There is also info on each of the players although this will quickly date. There are even little pictures of the kit the players wear at home or away games.

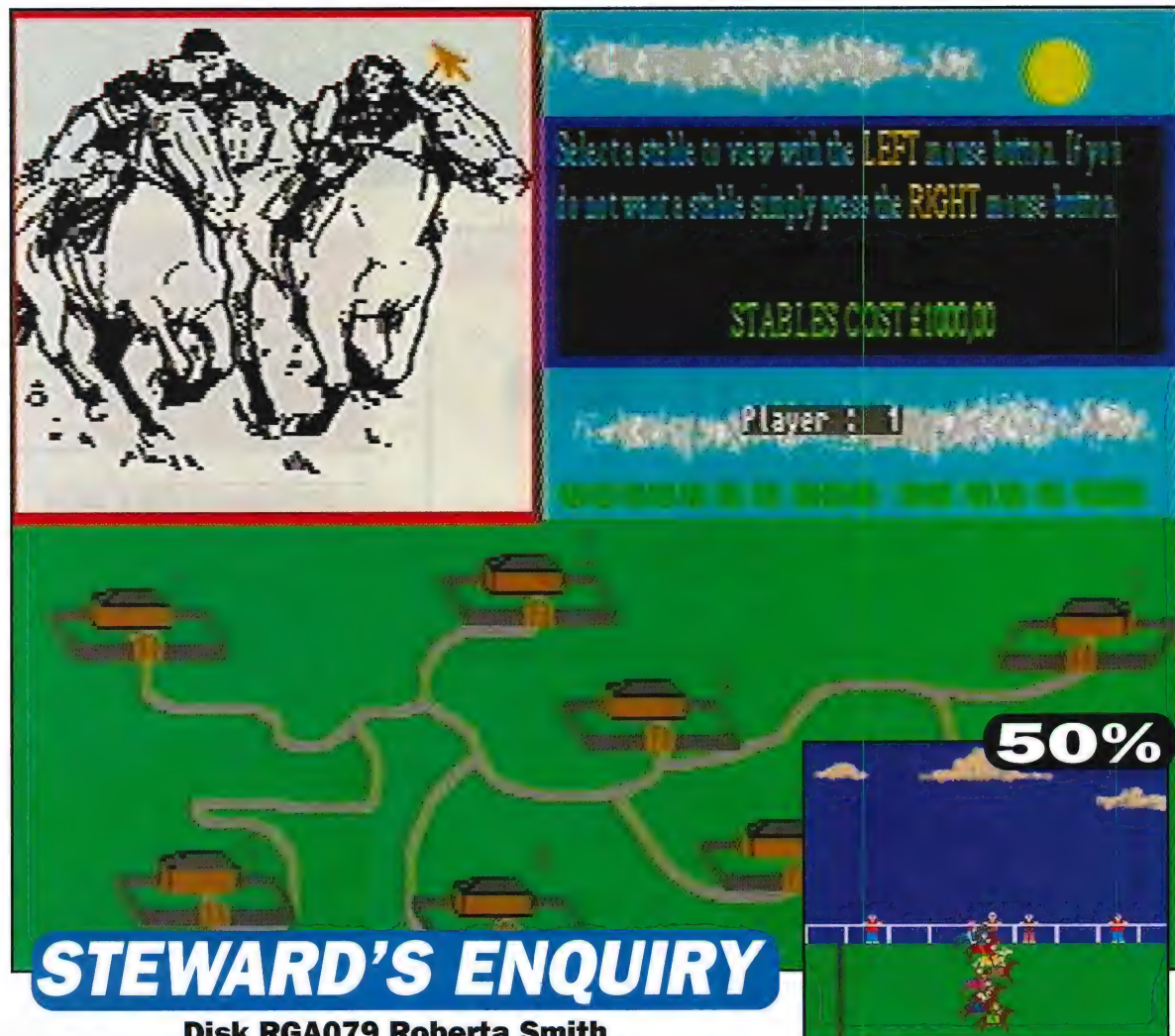
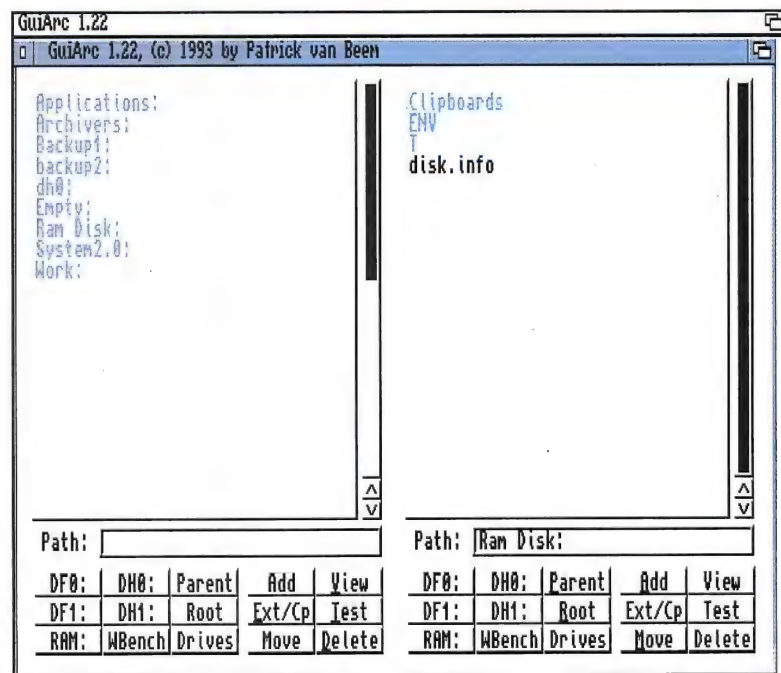
This disk is all very well and good but surely a Tottenham Hotspur fan will know everything about the club anyway. Who will really want this disk? (Certainly no-one who lives in Highbury!)

50%

Archivers

Disk U1105 KEW=II

There isn't just one standard archiving program across platforms there are many different types. On the Amiga the most used archiver is LHA. On the PC it is ZIP. There are other archivers



STEWARD'S ENQUIRY

Disk RGA079 Roberta Smith

This game is an attempt to recreate the horse racing games that appeared on the ZX Spectrum and BBC B. Those entertainments were very simple and involved you betting on very badly drawn horses running round a track. Hours of fun! The author of Stewards Enquiry decided to create his own in AMOS.

On loading you have first to choose how many races and players such as ZOO, ARJ, and ARC but they are used less often. The good news though is that there are versions of

you want. You then have the option to buy a stable for £1000. Cheap indeed!

Purchasing is not compulsory, but the advantage is that if it has the largest amount of winners at the end of the game then you get a prize bonus of £5000. You then can bet on each horse and after every player has done so, the race begins.

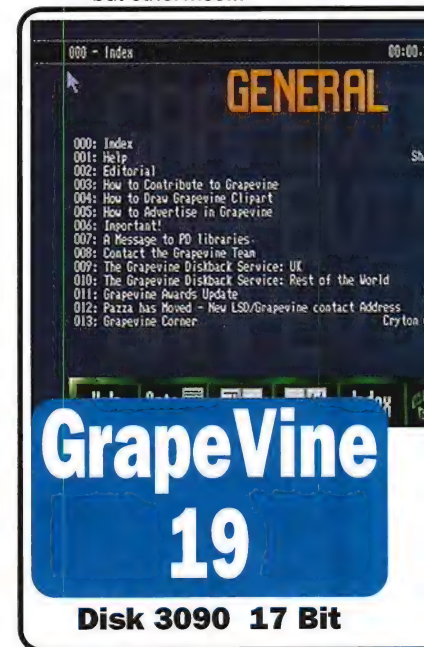
You see the race which is (well, each of the programs on both the PC and Amiga and the packed data can be read and de-archived across platforms.

This disk contains the Amiga versions of LHA, ZOO, ARC, ZIP, ARJ and DMS which is an Amiga only archiver for storing whole disks as one file. The excellent GuiArc is used, and coped well with most archives thrown at it. I tried the PC archivers ARJ and ARC, and they worked fine with PC archives. The only problem was with ZIP, this didn't want to de-archive, only copy to the destination. Luckily GuiArc can easily be configured to suit all of your archiving needs.

This disk is excellent if you, as it appears more and more people do, own both a PC and an Amiga and need to transfer archives across platforms. You can't go far wrong with this

85%

how can I put it tactfully?) rubbish. You would be an extremely sad person if you were excited enough to cheer your horse on with this game. Only people who are complete horse racing freaks will really enjoy this. You will also be driven mad by an annoying horse sound which plays every so often. If you're a relative of Lester Pigott maybe this is for but otherwise...



Disk 3090 17 Bit



Klondike Card Sets

Handy Software

I received eight sets of add on graphics for the excellent Klondike AGA from Handy Software the other day. While I am grateful for all PD received, it is difficult at the best of times to review graphics disks because you can either say they look good or bad.

These disks are good! They are as follows: Women Cards, which are of various famous Women. Cindy, which are of Cindy Crawford. Hajime, is a

different set of Hajime cards, the same artist who created the original set. Face cards are of Women's faces. (If that's the part of them you like.)

Sandman, are graphics taken from the Sandman comic. Iron Maiden, are the gruesome drawings taken from Iron Maiden Album covers. Finally Art Cards are classical pieces of art, including the Mona Lisa!

SuperDark 2.1a

Disk U1106 KEW=II

Everybody who uses their computer for work and has a word processor or any other program which is static for long periods of time should use a screen blander. If you don't, there is a possibility that the image will be burned in to your monitor. The blander will blank the screen or produce a fancy animated effects that move around the screen if the keyboard or mouse is not touched for a certain amount of time. The most famous of all screen blanders is probably the flying toasters which wasn't but should have been, designed by NewTek for the Amiga!

SuperDark, in my opinion is the best PD modular screen blander

available for the Amiga. This new version contains 27 blankers and is very easy to use. These range from a simple blank screen right up to wonderful plasma effects. You - or certainly others who haven't seen it before - will find it fascinating to watch the astonishing patterns that appear. And it's saving your screen from problems. The only downside to this program is that it does eat up precious memory, so if you have a bog standard A600 with just one meg of memory, there is only one thing for it, buy this and some more memory!

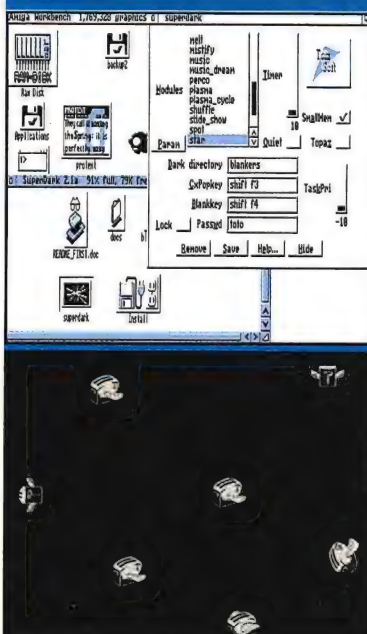
90%

GrapeVine, the most popular Amiga Scene disk magazine is back for yet another issue. This time it is on three disks and contains 380 articles. I am afraid although the quality of the presentation cannot be faulted, the standard of the articles is not very high.

There is a lot of drivel, with such articles as the Diary Of An Assassin, and My Dog - A Life, you can see what I mean.

There are plenty of good articles though including tips and solutions for many games such as Liberation and Beneath the Steel Sky, and also some good chat about the future of the Amiga. But like the rest of us they are just speculating.

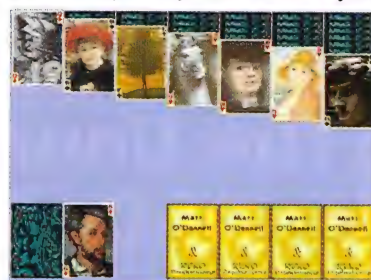
80%



All the disk are well-put together and if you are interested in graphics - or just having Cindy Crawford on your

screen (and who isn't?) - they are well worth trying.

90%



WB2 Utilities 1

Disk UT610 Roberta Smith

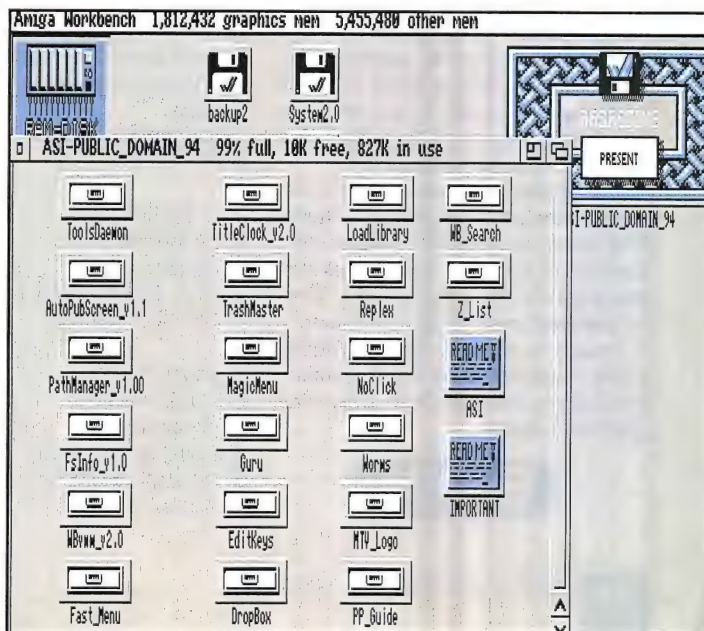
This is the first in a probably very long line (knowing The Assassins) of Workbench 2 only utilities. This disk contains no less than 20 programs. Although that is not as many as our current record (24) it is not bad going. It is strange that the Assassins did not

put the programs on an FFS disk if they are all OS2+.

There are a few programs that I have seen before such as Tools Daemon, and Replex, but the rest are new. They include, Noclck, that stops your disk drives from

clicking. Trash-master, which deletes icons dropped onto it. My favourite though is a program we once had on the Coverdisk and is totally useless, MTV_Logo put an MTV logo in the top right hand corner of your screen. This then zooms in and out, flips round and generally annoys the hell out of you!

80%



Office Helper

Disk BU170 Roberta Smith

Are you having trouble keeping your life in order? Are you? If you are then this disk may help you. It contains seven programs, the first being Amiga Diary. This sits on your workbench screen as a small window and can be expanded at any time. If you feel you need to write something about your life you can click on the open button and a page is displayed. You then type your memoirs. It is saved afterward.

The program Anymonth is a very simple database program, in fact it is too simple. Another, Flexer, also included, is much better. Home budget is described as a multi-featured, home budgeting/checkbook program but is a little fiddly to use.

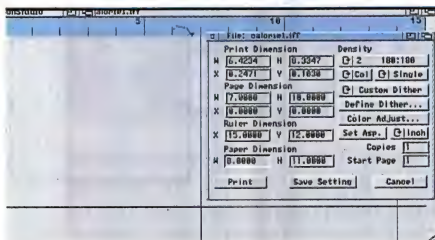
Pay advice is a neat little program that lets you finally throw away all of your pay slips. Just enter all the details into the program and save!

Share Manager looks an interesting program but a lot of people will have no use for it as it is designed to deal with stocks and shares.

I have left my favourite program to last. This to me, doesn't seem that useful in the office but is just interesting. It is called ShowSTD and is useful if you have a area phone code and you want to know which area it is. Just enter the number and the program shows you where on a map of Britain it is, useful?

79%

Canon Studio



Disk 3143 17 Bit

No one man (to my knowledge) has done more for the Canon printer than Wolf Faust. He has created drivers for almost all of Canon's Bubble Jet range. These latest versions are almost perfect, he has regually updated them. The Sperate Canon BJ10 driver is combined with a few others and now becomes the Canon BJ5-230. The version of this now stands at V6.

There is an excellent printing program included called Canon Studio. This looks very similar to the printing function in ADPRO. You can stretch the picture to the size you want. Then hit print and away you go. It is however a limited version of Canon Studio, some functions have been disabled. For £15 you can own a full version and get free updates.

90%

The Unusual Case Of Dr Strange



Disk 3151 17 Bit

This game was created by the same people who brought you Ork Attack which I reviewed last month. That was a good game, this is a brilliant one. An enormous amount of work has gone into every aspect of Dr Strange, from the graphics which are very detailed, right down to the sound effects, of which a number have come from the TV series Blake's Seven.

The basic idea is unoriginal. It is a platform game in which you have to kill all of the creatures in your lab which are the result of an experiment that was started by mistake.

You guide the good Dr around his lab using a pickaxe to smash holes in the floor. The creatures then fall into the holes, where you simply bash them to death. If you are too slow to kill the creature it will drag itself out of the hole and metamorphose to the next stage in its evolution. It will then require more bashes to kill. This really is a first class game and is highly recommended.

95%

Contacts for PD reviewed in this AUI.

F1 Licenceware
31 Wellington Rd
Exeter
Deven EX2 9DU
Tel: 0392 493588

17 Bit Software,
2/8 Market Street
Wakefield
West Yorkshire WF1 1DH
Tel: 0924 366982

Handy Software
4 Drumclog Ave
Milngavie
Glasgow G62 8NA
Tel: 041 956 6602

Roberta Smith DTP (PD)
190 Falloden Way
Hampstead Garden Suburb
London
NW11 6JE
Tel: 081 455 1626

KEW=II
PO Box 672
South Croydon
Surrey
CR2 9YS

If you have created a masterpiece and you would like it reviewed here or if you own a Public Domain company and want to contribute new and interesting PD, please don't hesitate to send it in. The address is:

**The PD Stakeout
AUI
48 George Street
London
W1H 5RF**

amiga answers

PROG

Dear AUI,
Could you please give me some advice? Can you tell me if there is a software package available for an Amiga which allows programming in "C"?

The reason I'm asking is that I'm hoping to enrol on a programming course in "C" and I am trying to save some money by trying to use my Amiga 600 instead of buying a PC. So I would be grateful if you could advise me on the following:

Is there an Amiga C software package available?

Is this fully compatible with a P.C. (i.e. will a program written in C on and Amiga run on a P.C.)?

Lastly, how much is such a package?

Your help would be much appreciated and I enclose an S.A.E.

Paul Reece
Crawley

Dear Paul,
Generally speaking there are versions of all the major languages, Forth, Modula, Oberon, C, Pascal etc. for the Amiga. As the majority of the Amiga OS was written in C, the Amiga has some very good packages available. The compiler of choice must be the SAC C. (Formally Lattice C) This is a complete system, costing about £250. It can be used with floppy disks, but I would never do so. A hard drive is a must.

Another package is Manx C. I can't comment much about this as I've never seen it in use, but for quite a time Lattice and Manx were leapfrogging each other's facilities.

The third option (and the one that you will like the best!) is a PC C compiler called DICE, produced by Matt Dillon. I have had a trawl through the Fish lists and disks 359 443 466 and 401 have versions on them.

Whichever library you use, it is worth checking for the very latest. DICE is shareware and the disk version is limited. You will not get floating point support, nor any of the CBM include files. (Which are copyright CBM). However the registration fee is about £50

Answer Types

APPS

Programs etc]

VIDEO

Video related problems

COMMS

Communications

PROG

Programming

OS

Operating System

PRINT

Printer Problems

COVERDISK

Cover Disk problems

OTHER

For Anything Else

which gives you the full version of the compiler, and a set of the CBM include files.

The second part of your letter is rather more tricky to answer. C is defined by ANSI and should be the same no matter what. However, this is only true for the standard library functions as defined by ANSI. If you want to do anything fancy or machine specific then you could have problems (depending on what you are doing).

C source code is nothing more than an ASCII text file so you could easily write the code on the Amiga and then use CrossDos to convert it to a PC disk. You would then compile this on the PC system. The same goes for the other direction. Save the source code onto the floppy and then use CrossDos to read it back into the Amiga.

No code compiled for the Amiga will work on the PC, the processors are different. However the same functions might be available, especially for the very simple programming that you are likely to get involved with at first.

A tip that I sometimes use is to set up a #DEFINE statement that sets a variable called AMIGA to true or false. This can then be used as a switch for the compiler to skip parts of the code depending on the machine you are compiling on. If you have a very special section of code for the PC, you can tell the compiler to compile up a simple message that displayed a text string "This function only available on the PC" or whatever you want. The idea behind this is that you can work on the

core of your program on any machine and you will only have to work on the PC specific parts on the PC.

OS

Dear AUI,
I have a couple of problems that I hope you could solve for me involving Commodore's A570 CD-ROM drive.

At this moment I own a A500+ with one Meg of RAM, a Seikosha SP-1900 plus printer and a Roctec Slimline external disk drive (which I am borrowing from a friend).

As my games collection is starting to get a little boring and as I need a CD player, I think the A570 is a great bargain at £99. However, before I decide to hand over the cash, I was wondering if you wouldn't mind answering the following questions to make my money well spent.

1. Does anything at all on your Amiga CD! magazine work on the A570? Do the PD games run or can you copy them onto a floppy disk and then run them?

2. Do games like Mean Arenas or Sensible Soccer for the CD32 (which are more or less straight ports from the original floppy version) work on CDTV/A570? If not is it because the CD32 game code is stored in a different way?

3. Does the Amiga CD! run at 150k/sec, 300k/sec or both?

4. Now that Microcosm is finally out, does it actually work on CDTV/ A570 CD-ROMs or does it use the CD32's AGA chipset?

5 Is the A570 really worth it or should I buy something else that is better value for £99?

Lastly are there any decent games for the CDTV/A570 which make good use of CDXL footage?

Andrew Robertson
Midlothian

Dear Andrew,
Some bits of the Amiga CD! disk will work and we are planning to include some of the Coverdisk utilities on the CD, after all with 600 megs to play with, there should be plenty of room. I

have used the Amiga CD! in a CD ROM drive and it really is just a standard CD ROM. However, much of disk is CD32 specific, so don't expect miracles.

You can easily copy files from the CD onto floppy or any other device, providing that is, that you can fit them on a floppy.

Any game that uses CD32 or 68020 specific commands or features will fail on any other platform. Some software does take this into account, others do not. You MUST check this out carefully before you buy. As a general rule if the packaging says CD32 and nothing else, do not expect it to work on anything else. You comment that some games are 'more or less' straight ports. Well it is the 'more or less' parts that will cause the problems!

The Amiga CD! does not run at any particular speed, it does require a double speed drive for some of the files however. The 150/300K per second are DRIVE speeds nothing to do with the CD. It would be possible with enough hardware to get the transfer rate up into the megabytes/sec the CD medium is quite capable of that. It's the hardware that is not. The CD32 has a double speed CD drive in it.

As far as I know Microcosm is a CD32 game. Your last point depends on what you term decent. Personally the only games that have kept me amused for longer than the time it has taken me to install them were Lemmings and Frontier/Elite.

Generally the 570 is a super bargain and no one will regret buying it AS A CD ROM. There are a range of CD ROMS available, CDPD 1,2 and 3 the 17 Bit collection represents several gigabytes of software to play with.

If you really want to play games then you should consider the CD32. It will act as a CD player as well and you can, with a little effort, connect it to your Amiga 500 as a CD ROM drive as well.

VIDEO

Dear AUI,
I have an Amiga A4000/030 with 6Mb RAM and a Microvitec 1438

monitor. This is used for serious work (Word processing, DTP, graphics, etc.), occasional ventures into music and games. I now wish to "get into" video and add a genlock. I also have a sound sampler, Vidi12 digitiser (with PAL VCR) and a printer, all plugged into the parallel port via a switchbox.

Basic genlocks can be found at a reasonable price, but they seem incapable of allowing me to use the monitor in the higher AGA resolutions for DTP, etc. since the only way to disable the genlock signal to the Amiga is to disconnect the genlock and reconnect the monitor to the video port. Even with RGB pass through, the genlock signal forces the Amiga to Use only PAL display modes.

The ideal solution would be a card for the video expansion slot, with a genlock that could be enabled when required and "switched off", when using the machine for non-video applications, thus leaving the video port free for the monitor, displaying whatever was thrown at it.

I am quite happy with the AGA displays and have no wish to use a 24 bit display oozing with pixels and price. I would also be quite happy if limited to VHS to keep the price down. A basic genlock can be had for under £200 and I see no reason why such a card, should be prohibitively expensive. However, looking around the various adverts, I can find no product that fits my requirements and budget. My questions are:

1) Do you or anyone know of any low price genlocks that can be disabled/enabled without wearing out the video port (esp. Zorro based)?

2) Is there a way to safely disable the genlock signal from "budget" genlocks without disconnecting the unit?

3) Are there any plans for Rombo to produce their digitiser range as Zorro cards?

4) Is there any news regarding a CD32 expansion for the A4000?

Please try to help, especially regarding the genlock as I am sure there are now increasing numbers of Amiga users with multisync monitors wishing to get into video.

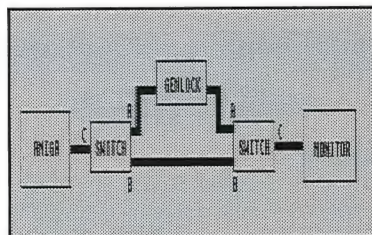
Kevin Mulcahy

Dear Kevin,
If you could find one of the old Commodore Internal Genlocks that might do the job.

As we use PAL then the genlocks do tend to force that mode, otherwise they would not be able to do their stuff! Unfortunately I do not know of the lower price genlocks with a on-off switch, which on the face of it is a

pretty silly omission. I have no doubt that you could modify one and I would not hesitate at having a go. However, if you have not worked out how to do this yourself then I cannot tell you how, as it will involve major surgery on the digitiser in order to fit the switches.

The easiest way around this problem would be to buy or make a special switch box. If you make, then you could arrange for all the switching to occur. If you buy, you may find it easier to buy two switch boxes and arrange them as shown below. I agree this is not ideal, but until someone makes a genlock with a full passthrough, it is the only solution.



C is the common connector.

When both switches are set to the 'A' position you are connected to the Genlock, in the 'B' position the monitor is connected directly to the Amiga.

As for Rombo producing a Zorro card, well, the basic design is already done in the Vidi 24 and translating that to a Zorro card would not be too difficult, but as always the decision would be a commercial one. Would they be able to sell enough units to make it worthwhile?

There is a CD ROM for the A1200 as reported in AUI, but I have only heard a couple of rumours about a possible unit for the A4000. We will just have to wait and see if anything comes of it.

OTHER

Dear AUI

I have just bought a CD32 after my revolutionary CDTV stopped revolving. My questions concern the keyboard port which is able to accept an A4000 keyboard. I have a CDTV keyboard which has a different plug to A4000 type. Do you have any information on how to change over the plugs (pin-outs etc.)?

D. Debtuch
Hatfield

Dear D. Debtuch

I do not have the pin outs of the CDTV keyboard but I do have the pin out for the CDTV.

You are only interested in 4 pins:

- 1 = clock
- 3 = ground
- 4 = +5v
- 5 = Data

5 x x 6

3 x x 4

x x

1 2

Looking into the CD32.

So if you can work out the connections for the CDTV, which should be fairly easy for the +5 and ground, you could roll your own.

OTHER

Dear AUI,

I have recently bought myself a second hand Amiga 1200. It has

2 meg of chip RAM, a Power Computing 1.76 Meg internal drive and a Power Computing external drive.

I had the 1200 working fine for about 2 days, when after rebooting the machine for some reason or other, I noticed that the screen colours looked odd.

For some strange reason my Amiga is displaying yellow where it should be displaying white. I have tried a different TV, a different RF cable but the problem still persists! It's not a software problem because when I load up games or whatever any white still appears yellow. Am I making any sense?!

When I soft reset the Amiga, it screen goes sheet white (as it should) then you can hear it switching screens resolutions whereupon it goes black and then it carries on booting up in the usual way.

Have you got any idea what's wrong with it? Could the modulator be ill? I know it's not a major problem or anything, I can still use it perfectly, it's just bloody irritating and I want to get it sorted out!

I bought the Amiga second hand, but I did get the original receipt with it. It was paid for by cash and the original owners name isn't on the receipt. It was bought in January 1993, so even though it's been more than a year do you think the electrical store where it's from (Dixons if I remember rightly) would exchange it? (If I don't tell 'em I'm the second owner!)

Anyway, I'd like to pass on my congratulations on producing a great Amiga magazine. I have only bought 1 issue and only read the answers pages, so how can I tell it's a decent magazine? By the amount of space you give to replying to readers problems. Most magazines will only spare you less than a 100 word reply.

Chris Brookes
Manchester

Dear Chris,

You have a very strange problem. To be honest I can think of only two possible causes. The first is a hardware problem, but I don't think that it is the modulator. Is there any way that you can beg, steal or borrow a monitor and lead? That would isolate the fault to the Amiga hardware or the modulator.

As your A1200 is more than a year old, no store will willingly exchange it, but they might arrange for repair.

Before you try that route there may be a simple answer. Do you boot from a set of boot disks when you try the games, or are the games selfbooting? If you boot from your own disk, it might just be that your colour preferences settings have become trashed somehow.

It is odd that you say that it is only the white that is affected, are you sure about this? Also how deep is the yellow. I get the impression that it is only a slight shade, more of a cream than yellow.

Try the following:

Open up preferences and have a look at the Palette controls. See if you can adjust one of them to pure white, if you can then you do not have a hardware fault, just some software corruption.

Once you have everything set, remember to save your settings.

Thanks for the nice words about Amiga Answers, but please read the rest of the mag! There is a lot of information in it.

The Editor has increased the size of Amiga Answers for the last few issues, as I had a rather large backlog of letters awaiting publication, but it is the readers who effectively decide on the size of Amiga Answers. If I only have a couple of pages worth of letters, than that is all that will get printed. The replies are as long as need be, sometimes they amount to a mini article, other times a couple of sentences suffice. We're happy to keep solving all your problems - or at least those on the Amiga!

OTHER

Dear AUI,

I have been considering for some time about adding a hard drive to my A1200. I cannot make up my mind whether I should go for an internal or external IDE or SCSI such as the Overdrive 35. The more questions I ask of suppliers or the articles I read, the more confused I get. For instance, I read the article in your May issue 'Exploding the A1200'. In the section on hard drives Jeff says of internally powered IDE drives: "the current drain can have an adverse effect on other parts of the system". Then at the end of the

article when giving the AUI ratings his advice on external PCMCIA drives is: "Buy a big internal one first". So could you help me by answering the following questions, please.

1. I have heard that a PCMCIA attached drive will slow the whole machine down as the PCMCIA interface is only 16 bit. Is this true?

2. 3.5" IDE drives will fit internally. Is there any problem in using them or should I stick with the 2.5"?

3. How badly is the rest of the system effected by an internal drive? As I have an external PC880B floppy and a MIDI interface which I assume both draw power from the same source that an IDE would.

4. I have been given an IBM SCSI drive that I was going to use. Where could I get a case from and how would I connect it without invalidating my warranty?

5. I think that I may already have a problem with my internal drive. I recently had it replaced by Wang as there were some disks it just would not recognise (e.g. Jurassic Park) whereas they were OK on a friends machine or my own external. The Wang man could find nothing wrong but replaced the drive anyway (nice chap). The new drive is now O.K. on the disks that the old one didn't like. However, the new drive cannot now read a couple of other disks. For example with my back up copy of OctaMed V5, it either doesn't recognise it as a DOS disk or gets loads of read errors. The original disk works fine in the internal drive and the backup works fine in the external. I've tried re-copying (to more than one disk) using Xcopy or Workbench. This seems to work when copying from DF0 to DF1, but fails miserably with errors on every track when trying from DF1 to DF0 or even DF0 to itself with DF1 disconnected.

Do you think this is actually a problem or just one of the Amiga's little quirks? Do you think the problem would be aggravated by adding an internal IDE?

I would really appreciate some answers as it's my birthday soon and I've managed to con the wife into letting me have a hard drive as a birthday pressie. If any of you are married, you will appreciate the significance of this.

John Morris
West Midlands

Dear John,
Happy Birthday! (Whenever it is)

I note that you say "letting you have" and not "buying for you". Still you will find that a hard drive is the best thing you can attach to the Amiga, it makes the world of difference.

The PCMCIA attached drives only

slow the system down compared to an internal type because the processor has to grab data in 16 bits from the PCMCIA where other systems allow 32 bits at a time. The actual machine is NOT affected in any way. In practice, unless you are performing very time critical operations you will not notice the difference.

Only a very few 3.5 inch drives will fit inside the A1200 and they are not covered by the CBM warranty. Stick to 2.5 inch drives.

Cases abound, look in electronic mags, such as Electronics and Wireless world. Look for PC desktop or mini tower cases, they cost between £25 and £80 and normally have a Power supply as well. I have a PC mini tower case housing my external Hard drives and Tapestreamer attached to my A2000. You will need a SCSI card that fits into the Trapdoor and has an external SCSI connector. Add the correct leads and away you go. A word of warning at this point. SCSI devices are a bit picky in how you connect them. You will need to 'terminate' the last device in the chain. Also IBM drives are notoriously awkward beasts to get going.

A lot of your comments stem from a slight confusion as to what is providing the power. The IDE, the A1200 and everything else gets its power from that thing that you probably use as a foot rest. The 'brick' that you plug into the wall socket and the Amiga. It has been known that this 'brick' is only just powerful enough to power the Amiga, but more powerful replacement units are readily available.

Your problem with your internal drive. NO NO NO it is not a quirk of the Amiga, nor of any other computer. Your storage devices should work correctly at all times. Unless you have a copy protected disk then you should be able to copy between drives without any problems.

Check that you are using good quality branded disks. If you can, try formatting a disk in DF0 that has NEVER been used before. It sounds as if your original drive was very slightly out of alignment. If that was so, then it could have written data between tracks on a disk and this is causing problems. A virgin disk should prove this.

If this is the case, demagnetise the used disks before re-use. The old fashioned tape head demagnetisers were good for this. (You will only have to do this once) If this does not prove to be the case, then put in another service call.

OTHER

Dear AUI,
I have been buying magazines for just over a year and am still in the

dark over a hard drive problem. I want/need one but I don't know anyone who has an Amiga HD. What I need to find out is just how much noise does a HD make, is it constantly an annoying buzz or what - no one seems to ask about this and I'm worried if I get one the noise will eventually get to me.

Re hard drives official upgrades, I called ICL about this and they gave me a number which turned out to be a mail order company. They were willing to send me a drive for self fitting, but didn't want to know about warranty fitting, possibly the huge distance involved, do you think ICL have a Belfast section but no local supplier any chance of putting pressure on ICL over this because I also cannot avail myself of their extended warranty?

Lastly I like many others want a CD ROM, a CD32 if there is going to be nothing else. What, if any, way can the CD be connected to the A1200 and make use of all the memory etc. "Brian Fowler's" advertisement for an add on port, is this what I need? Have you tested it or anything similar? Or is this question months too early?

B. Mahony
Co. Antrim

Dear B. Mahony

Hard drives for the A1200 are very small and very quiet. It will depend on the surface that you rest your A1200 on as the level of noise that you get. A soft mat will deaden any sound if you get the sounding board effect.

You will hear the drive spin up and click and whirr when accessing. Just to give you an idea, I have 4 Hard drives attached to my A2000 and the power supply fan drowns out just about all of the noise of the hard drives. You will get used to the noise anyway, after a while you will not even notice it. (I don't even worry about the fan noise any more).

ICL have a contractual agreement with CBM, if the terms of that agreement only cover the UK mainland then that's the end of the story.

Keep a look out for hard drives that plug into the PCMCIA slot, that will solve your problem without voiding your warranty.

Your letter is not months too early, AUI happens to have a publication delay (It takes quite a bit of time to produce AUI) and I know ('coz I wrote them) that there is a review of the CD32 add on port and a CD ROM drive for big box Amigas.

The CD32 add on port is a very nice product, but it only allows you to connect a CD32 to another computer. What other things you can do depends on the software. The Twin

Express software is a command line file transfer system. It is very good and can be used on PCs as well as Amigas, but it is not the most friendly of systems, but it gets the job done. You cannot make use of the CD32 memory on your A1200 via a simple connection like the add on port.

OTHER

Dear AUI,

After 4 years of using an ST, I thought it was time to move on. I purchased a CD32 some three months ago and I would like to connect a keyboard and a disk drive to turn it into a CD-1200. I have ordered a SX1 module from Indi direct and a keyboard, but I thought I would buy a dual drive from Power. I phoned them, but the secretary said it would not work with the CD32, even after explaining about the SX1 module. I don't know if they have tested it with it being new, I don't see why it shouldn't work, unless the SX1 doesn't really turn it into a standard 1200. I also asked Indi but they didn't know if it would. If it doesn't work could I get some sort of adaptor, or would I have to buy 2 PC880B drives (If they work)? I was wondering if you could help. I would be grateful if you could help solve this problem. I love the magazine and CD. I've just seen the two disk issue, what's happened to the CD issue?

Ralph Headley
Cheshire

Dear Ralph,

I was not aware that the SX1 was available yet (It may well be available by the time you read this reply). However, you have already done the correct thing. Indi's agents for Microbotics should be able to answer specific questions about their products.

The SX1 should be able to use standard A1200 compatible drives, in fact Indi advertise Zappo Drives which are about as standard as you will get. You need to ask the question in a slightly different way. Such as, 'is the floppy port completely compatible with the A1200 floppy port?' If the answer is yes, and I suspect that it will be, then any drive designed to plug into the A1200 floppy port will work.

CDs take quite a long time to produce. Don't expect to see a CD on every issue. That would not be fair to non CD owning readers. The next issue of Amiga CD! is taking shape very nicely and I think that you will enjoy it.

OTHER

Dear AUI,
I'm a little concerned about your treatment of emulators in AUI Answers May issue, which contained a lot of answers I take exception to.

The Emplant Mac emulator does NOT require an MMU, but it is recommended for speed. The PC unit is not at the time I write available. There is also the ReadySoft A-Max IV Mac emulator, a board comparable to the Emplant.

You give the impression that emulators are unsuitable and incompatible. In the case of PC bridgeboards, the emulator is about as compatible as compatible gets. Even the ??? based Mac emulators above do a very reliable job of running.

You mentioned (in all capital letters) that PC cards don't work directly on the Amiga. This is true, but a board known as the Golden Gate II exists to allow using ISA cards on the Amiga.

Finally you told John Hanrahan that nothing came close to the sort of system he devised. I'll say he can in a 4000 place an Emplant or A-Max a 486 bridgeboard a ??? multi PC I/O card and an EGA ??? or other 24 bit card. Not cheap or easy, but it would work.

Jason Compton
Emulator Editor
Amiga Report Magazine

Dear Jason,
Firstly an apology to you, I may have misworded some of your letter. I just cannot read your handwriting and I've guessed at some words, so the context may be slightly wrong.

I just admit I am slightly bemused by your letter. I don't see any such impressions as you claim. I simply say that emulators are not native machines and I also give a general warning about compatibility. It is physically impossible for any company developing an emulator to test it on a wide enough range of software to be sure of its performance. I would even dispute a PC clones claim to be 'compatible' for much the same reason, but a PC clone has a much better chance as it uses a specified architecture.

Emulators are fine tools for some jobs, but in many cases they may not be up to the task. If a reader asks me will xyz emulator run abc software, I have to say 'possibly' and also that the only sure way is to run the software on the native platform.

It is really a question of using the correct tools for the job. The Amiga is a fine machine, just about the best there is, but fill it with a host of emula-

tors and you could get the situation of having the jack of all trades, but the master of none. I certainly would not advise a reader to shove in the combination you suggest because of the difficulties that would be encountered in getting everything working in harmony. (As you yourself admit).

The question about cards was precise, would the Soundblaster card work in the Amiga, well, the Golden Gate is a very useful card and I know that there are drivers for some ethernet cards, but Soundblaster in all its forms - I don't think so.

I think that you may have a personal problem in that you are very much 'into' emulators and you find it difficult to see the wider aspects involved. To the 'normal' Amiga user, who is very definitely not an engineer or programmer, any form of emulator is a risky investment at best.

Just a quick mention about Amiga Report for AUI readers. This is an electronically distributed magazine, which is produced by a lot of dedicated Amiga users/authors/programmers and if you have access to a modem and a BBS that carries Amiga Report, it is worth a read.

OTHER

Dear AUI,
I am the proud owner of an Amiga 1200 with 250 Meg hard drive 4 Meg fast RAM, 14 Meg FPU and, of course, a Cannon BJ10 printer.

I have few questions on CD drives.

Do they all have to be plugged in an SCSI port or can you get them to plug into IDE ports?

If you can get one with IDE port on it, can I use a dual cable to plug the hard drive and the CD drive into the controller in the 1200?

The only advert I've seen for a Amiga CD drive is the TOSHIBA 4101, 3401, but these only plug into an SCSI device, prices start from £219 to £314, but I have seen the same drive advertised in Computer Mart for £60 to £70 cheaper.

If I get a cheaper one, can you get PD software to mount and access the drives?

I'm also thinking of buying an GVP 1230I with the SCSI interface, can the GVP 1230II be used on a suitable SCSI interface for the CD drives?

A lot of the things I will be getting on CD is mainly for the PC i.e. disks with pictures, scenery, music, clipart and so forth., how easy would it be to access the PC CDs, would it be like the CrossDos utility similar to the one on Workbench 3 software?

Finally I am thinking about buy-

ing my son a CD32 for Christmas if I buy the add on for the CD32 i.e. Keyboard, disk drive, etc. is it possible to ParNet the two machines together?

Those are all my questions for now. I hope you will be able to help me choose the best for my and my son's needs.

G.Pendlebury
Bolton

Dear G.Pendlebury,
You plug a CD ROM Drive into whichever interface it needs. You then need some driver software. There are CD ROMs for the Amiga, mainly the 2000,3000 and 4000. SCSI drives work very well and you need a SCSI interface to run them. There are other drives that need a specialised interface in order to work. (See my review a couple of issues ago).

There is a PD driver / filesystem available that will work with ISO9660 CD ROMs. The latest version I have is amcdrom14.lha and is available for download from CIX and The Internet. As most CD are ISO9660, you should be able to read them without any bother. I have read all sorts of PC disks without any problems, but I have come across some that refuse to play ball.

You cannot ParNet the CD32 to another Amiga unless the CD32 expansion unit has a parallel port. You can SerNet the CD32 to another Amiga without any problems. You do not even need to use SerNet, but it does make life much easier if you do. The new version of CDPD I has the SerNet files already set up for use. You just need the CD32 add on port.

OTHER

Dear AUI,
Problems, problems, problems, that's all I seem to have these days. Let's start at the beginning. I can remember screaming a lot and people staring at me and saying "Oh, isn't he lovely" but then again I think that's going back a bit too far".

On a more serious note, some background. I am a trainee electronics engineer, at college 1 day a week and working for a repair company for the rest (A sub repair company for ICL I may add!!). My first Amiga was (and still is!) an A500 with an external disk drive (PC880B) and Action Replay III. Which out of generosity I gave to my younger brother who played with it for a while, but then caught a glimpse of what I'd bought for myself. Wow!! An Amiga 1200, double the amount of bits, double the amount of memory, an Advanced Graphics

Architecture chip set and a PCMCIA credit card slot (!?!What Use?!). Not a month after buying it I took hold of my screwdriver and wearily opened it (Warranty. What warranty!). Not bad! all surface mount, good quality PCB pretty neat!!! 3 or 4 months later I bought a secondhand Conner 2 1/2 inch 60MB hard drive which I fitted (Mistake!). Well! I didn't know you had to release the fitting which surrounded the keyboard connector before pulling it out at some speed!! Anyway the fault of only the left hand side of the keyboard working has now been resolved (obviously, otherwise this letter would have been sketchy in places!!). For quite some time I was quite happy, pretty kickin' machine eh'. NO! ... More was needed ... MORE POWER!!!

So earlier this year I gathered information on accelerators and memory expansion, I phoned Power Computing, they were very informative they told me that they had two accelerators for the 1200 which were the PC1204 and the PC1208, now I forget what the difference was but they told me that they were terminating the production of the PC1204 and magazines such as yours told me that the PC 1208 was good. So I saved my pennies and bought one! (Through the company of course!) Ahhh! Finally POWER! PC 1208 4MB of 32 bit local kick DMA Fast RAM, 50 MHz accelerator and maths 68882 co-processor for 300 notes (like I said through the company!!!).

About a month ago I purchased a printer, a Citizen Swift 200C, mainly bought for college reasons, but also used for printing out circuit diagrams for things I might want to make in the future. All work perfectly together in harmony, which brings me to my first question, I didn't see a lot of a speed change considering it was a 50 MHz accelerator. I did see a speed change but not as dramatic as I was expecting, is this because it is an 020 accelerator or the fact that it is just a slow accelerator?

Also before I fitted the card the hard drive had a transfer rate of 807k per second, now it is 724k per second (SysInfo was used to obtain this information). Is this because of the accelerator or is it because the hard drive is 85% full? I heard that hard drives slow down when they start getting full!! If the answer to the accelerator problem is that it is just a slow accelerator can you recommend another for around the same price, if so does anyone want to buy this one off me!!

The hard drive problem isn't a very big one because 724k per second is still quite fast for an IDE hard

drive, but I still would like to know what the problem is. Also I am considering fitting another hard drive, but most people say that you can't fit two hard drives into an A1200, then again I have seen Document files and pics that show two 3 1/2 inch drives (Yes 3 1/2!!) fitted inside the casing (Yes inside!!) of an A1200. Is this a wise act to follow or should I put the second drive outside the computer? I now know that you can have two IDE hard drives on the Amiga just by making one the master and one the slave (Jumper links!??).

Since I am training to be an electronics engineer is there any software to allow me to design circuits and circuit diagrams, I have tried a few PD ones like M-CAD, TRONI-CAD and ELECTRO-CAD, the best of these was ELECTRO-CAD, but still died a death compared to some of the PC software I have used. If you can help me on one or more of the above topics, it would be very much appreciated!

Simon Margerison
Leeds

Dear Simon,
First of all your accelerator, well, you have replaced the 020 with a faster 020 processor. However, all the basic memory and I/O will still have to work at the original Amiga clock speed, so you will not see a blindingly fast screen update. The real speed increase will happen in the background and will depend on the program. If you are doing any Ray Tracing, then your maths co-processor will make a hell of a difference as will the speed of the processor, PROVIDING the program makes use of the Co-Pro. Anything that is processor intensive will also benefit.

Sys Info is not renowned for its accuracy in transfer rates. I would ignore it. (Try clicking the test speed a couple of times and see what happens) A badly fragmented hard drive can suffer speed wise, as the head will thrash all over the drive looking for bits of files. That is a very good reason to partition your drive up, Keep the programs in one partition and the data in another as far as possible. You should also have a System partition as well. Every so often you can back up the partition, reformat and then restore. Alternatively you could use a disk optimizer program, BUT make the backup first just in case. This will ensure that the programs are restored as contiguous sectors, and the heads will not have to thrash about so much.

I suppose that you could fit a second hard drive inside. It would be a squeeze and the interface would be strained. The jumpers are on the drive and vary from drive to drive. Also some drives are not exactly to spec and will not work with other types of drive.

The risk is all yours!

You have tried the main programs I know about and I don't know of any commercial programs. There is a rather nice Digital emulator program called digital breadboard, the file name is dbb119.lha and is on most Aminet Internet sites. It is worth a look. As for drawing circuits, a good structured drawing package is what you need. Just define each component and an object and you can paste it down wherever you want to.

OTHER

Dear AUI,
I am the proud owner of an A1200 with the Desktop Dynamite package, with 2MB RAM, 0MB hard drive and a Microvitec Series 13 Auto Scan monitor (with Logic3 stereo speakers) I have had virtually no problems once I had got used to the Workbench system and all of the utilities, after being used to using the Amstrad CPC range for a number of years. I have been very pleased with my Amiga and your magazine was the first Amiga magazine I sampled and ever since I have been reading it faithfully every month. I have a few questions I would like you to try to answer.

1. I already own a Citizen 120D+ DMP and have been looking at colour printers. Having seen a number of different printers, I have nearly settled on purchasing the 200C (when I have saved up my cash), which would allow me to print out some of the pieces of artwork I have created using DPaint IV AGA. I would like to keep my old printer, just for black and white documents, as I have been very pleased with the quality of output when using from Wordworth with print manager. Is there some sort of switch box I can use to allow me to connect both printers (and any other parallel port interfacing hardware) at the same time?

2. I have noticed that a lot of the new programs are very memory intensive, indeed I have suffered a great many problems from memory shortage when trying to animate on DPaint and need a hard drive as a minimum requirement. Would you recommend that I purchase extra RAM or a hard drive first (bearing in mind that I am only 14, and am frequently skint!)?

3. I have heard rumours of a CD ROM drive that has been manufactured by Commodore for the A1200 and this is now available. Is there really a CD ROM drive for the A1200, is this rumour just untruthful? If there is a CD ROM drive can you tell me how much it is likely to cost?

4. I picked up a copy of the May

edition of your magazine and was delighted to find a copy of Tiger Cub on the Coverdisk. When I got home and decrunched Cub, Samples and all of the Libraries, I could not get the Cub program screen to stay on for more than a second. I rebooted and just decrunched Cub and samples again with no luck. Again I rebooted and just decrunched Cub, this time I got the program to stay on screen. But all of the pull down menus and screen text were written in complete gibberish. Due to a bit of detective work, (by looking at the advert for the upgrade of Tiger Cub), I do not think that Tiger Cub should work on the A1200 (nor the A600 or A4000 for that matter). Please help.

5. I have created some data bases using SuperBase on the April Coverdisk, but cannot print them out. I have followed your advice and copied the Epson X driver (this driver does work for my printer) onto the coverdisk, but the program will not print out either the data bases or the text. Can you tell me how to get the program to print my data bases?

6. Is there a set of foreign spell checkers available for using with Wordworth? As I, and I am sure many others, will find them useful.

7. What type of fonts can I use on DPaint, as the two provided are not very creative?

Nick Botham

Dear Nick,

1. Switch boxes are readily available for just the purpose that you want. I have several of them attached to the parallel and serial ports of my Amigas. I happen to live fairly close to a Maplin shop and I find that their boxes are very good. The 4 way box Stock Code ZA63T costs £20. You will need a lead to connect between the common of the Switch box and the Amiga. A 25 way Male - Male cable will be required to do this. Stock code JC12N costs £7.

2. I would get the hard drive first. Look out for drives that offer memory expansion as well, that will be a cheaper way of upgrading your memory. You will find that things are so much easier used with a hard drive.

3. Yes, a CD ROM drive for the A1200 does exist (as reported in AUI). However, it is not yet on sale and the prices have not been announced.

4. Tiger Cub has problems. However, your comments about getting it to run on an A1200. Well, I don't have an A1200, but I do have an A4000/040 to test it on.

It runs up without any problems at all, it looks as if you are running into memory problems again. I expect that you are decrunching into RAM and then running the program. You do not have the memory to do that! A hard drive will cure this.

5. No problems at all with

SuperBase. Make sure that you boot normally. Do not boot from the Coverdisk. What is happening is that there are no prefs settings on the Coverdisk, so SuperBase does not know how to print. Boot normally and then load SuperBase from the Coverdisk (a copy of please) and all will be well. Select Set menu/printer to set the output to the printer, then Process/Print to do the printing. Set up the filter as required, and that's it!

6. Foreign spell checkers are available for several different word processors. I don't know about Wordworth. I suggest that you contact Digita directly. There are often license problems with the dictionaries used in spell checkers, so be warned it may be an uphill battle.

7. You can use any normal Amiga font that you have. Double click on the text tool to bring up the requester. Again as you are running from floppy you will only see the fonts on the disk, not all of the Workbench fonts.

COVERDISK

Dear AUI,
Re Superdisk 36. After many attempts to transfer programs onto RAM and floppy disk, I could not. I gave up within an hour of trying. I looked through AUI later and saw a letter saying I should copy the .ARP library. I tried this, but I could not find the .Arp library. Could you tell me where to find it?

Howard Burt
Kent

Dear Howard

You don't need the .ARP library for Superdisk 36, it has the new version of Lha on it. I have decrunched into RAM: without any problems. Unfortunately you have not given me enough information as to what you have done for me to be able to work out what the problem is.

COVERDISK

Dear AUI,
With reference to Coverdisks 35 & 36, the new installer system has got me baffled and is not as easy as it seems.

This letter refers to helping me to understand the install system. There is no referral to any disk as both disks are booted in the same way.

I insert the disk and click onto floppy disk and it comes up I may need a few formatted disks which I then prepared. I selected the file I required, but the problem comes when the screen for the destination of file. I can't understand how to

PROG

download onto my blank disk, it always comes up with an error. If I select RAM disk I could be swapping disks all night and nothing would happen.

The user notes in the magazine does not clarify how to do it step by step could you go back to the old system.

Mr M.J.Finch
Germany

Dear Mr Finch

Make sure that you name your formatted disks, as this makes it easier to keep track of things. After you select the file you want to decrunch, in the destination requester just enter the name of one of your disks followed by a ':' [colon]. I have just tested this procedure with a disk I formatted and called 'andy1.' You will get a requester telling you to 'insert andy1: in any drive', so do just that (the process is much easier if you have two floppy drives) then you will be told to put the Superdisk back in. After a few disk swaps you will have a decrunched program.

Remember that if you can fit the program into the RAM: disk do so, as it is much easier. That is why the installer generally defaults to the RAM disk. Once it has decrunched into RAM, you can use the show all files option from the Workbench/Icon menu and drag the files to a blank disk. (Assuming that you are using a WB2 or better machine.)

COVERDISK

Dear AUI,

I am a newcomer to the wonderful world of Amiga and I bought the May issue for the Tiger Cub Coverdisk, but regretfully have been unable to use the program.

I copied the Coverdisk to RAM and then dragged the icons to my formatted disks. Everything seemed OK and I got as far as clicking on 'load IFF instruments', but didn't get a requester or any instruments. Instead in load Instrument bank, I got items like (dir) prefs (dir) system and (dir) trashcan leading to the message 'Instruments not found masked with an asterisk' when I clicked on 'Load IFF Instruments'. Can you advise, please?

P.J. Bayer
Brighton

Dear P.J. Bayer

I'm not going to be much help here. You are doing everything correctly, it is just that there are NO instruments on the Coverdisk! I expect that you will have seen something about this in the June issue of AUI.

Dear AUI,

Please, can you help me out?

I wish to use my Amiga 500 plus as a piece of control equipment, using its centronics port to interface it to logic circuits/data lines.

What I require it to do is this:

Read in 4 data bits from the parallel port and write 4 bits out of the other pins. I wish to configure 1/2 of the centronics port as read only and the other 1/2 as write only.

I was hoping to use the Arexx language as a means of control/operation. Is this possible or should I use AmigaBasic?

How do I configure the port, what commands do I use and do I address the port data direction registers individually or all at once, i.e. 11110000?

Would the books Amiga System Programmers' Guide and Advanced Amiga System Programmers' Guide help me? I have the Arexx book and the Amiga Intern Reference Guide as my only sources of reference so far.

Mark Elliott
Nottingham

Dear Mark,

Thanks for the flowchart of what you want to do. I think I can go one better than that, however. There is an interface system known as IIC and Peter Darton of cix produced a version for the Amiga. This allows 8 bit read write on the Parallel port.

The books that you have are not very useful, apart from the Arexx book which is pretty good. The books that you should be looking at are the ROM Kernel Reference manuals. Also, I have found more information in the Making Music book! Particularly in the sampler construction area.

The file names are:

iicstuff.lha

iicupdate1.lha

Both are to be found in the Amiga/3listings conference.

OTHER

Dear AUI,

I recently bought a CD32. My decision was swayed by the fact that with the addition of an interface, keyboard and floppy drive I would have a A1200 with CD ROM. With Microbotics SX1 this is now possible. With a keyboard and drive this brings the price to approx. £230. Now comes the dilemma.

For £40 more I could buy another A1200 and a further £30 could

connect it to my CD32, giving in effect two A1200s. Could you tell me if this is the best option and the pros and cons of doing so? My uses would be games playing, word processing and in the future DTP and graphics.

P Gallagher
West Midlands

Dear P. Gallagher,

Sometimes life seems very unfair, but when you take into account the limited sales of interface units (at least in the early days) the costs are quite high.

The cons against buying another A1200 are not many: the extra cost, the extra space and the problems of swapping monitors/TVs.

The pros. Well, the best is compatibility you will have no doubt that things will run. Expansion devices such as hard drives are readily available for the A1200.

Connecting the CD32 and the A1200 together is very easy, but the link speed is a bit slow. Not normally a problem, but worth noting (transfer speed with twinexpress is about 40K/s).

I would go for a A1200 as well as the CD32 if you can afford it.

APPS

Dear AUI

Can you please help me? I have got the great A1200 and I bought the Miracle Piano Teaching System.

But I have drop some drink on the disk and now they do not work. Can you please tell me where I can

get the software from and how much the disk will be please?

Also is there any Amstrad CPC 464 emulator and hardware for the A1200 so I can load my tapes into the A1200 and save them.

One more thing - where can I get a book to do with Bars and Pipes V2.0?

Victor Young
Finchley

Dear Victor

You don't need to get new software disks at all. Just get your original disks out of the safe place where you put them and make a new set of working disks. You were using backup disks were you not?

If you were using the original disks, well serves you right! ALWAYS MAKE BACKUPS OF IMPORTANT OPERATING SYSTEM DISKS. I hope you are not using your original Workbench disks.

Try wherever you bought the system from first. If that does not yield any results, write to the address given in the handbook.

I have not seen a 464 emulator for the Amiga. If the 464 has a serial port then you could possibly write the data from the serial port on the 464 to the Amiga serial port. You would need some comms software on each machine and a connecting lead to do this.

I don't use Bars and Pipes at all and I've not seen a book on that package. The handbook should tell you everything that you need to know.

Other than that, keep an eye on the adverts and news pages and hope that someone is writing such a book.

When writing to Amiga Answers include as much information as possible about your system and about which software/hardware you are running. This will help to determine what your problem might be and its solution!

**Send your questions to:
Amiga Answers
Amiga User International
48 George Street
London W1H 5RF**

write to reply

Bud Vennos meets the postbag head on!

Dear AUI,

I am writing to say it is a great idea to put a CD on the cover of your magazine, except living here I do not get it. We are given the second disk, but how can I get the CD which I have been unable to get for the last few issues? Being an avid user of CD it is frustrating to read what is on the disk and not being able to get one to use myself.

If I took out a subscription would I get both the CD and the second disk, or would I still have to pay £1 to you every month to receive it? I have seen no mention of this in your subscription information so I am not sure if this is the way it is done, or if not, why not?

Thanks for your time, and keep up the good work!

Gary Rippon
Switzerland

Dear Gary,

Sometimes it's difficult for us to know what's going on. We get letters from New Zealand telling us that they have received AUIs with the CD on the cover but apparently in Europe, you don't get them. And in Switzerland too which is one of my very favourite places. I even spent a year in Geneva where I had some of the most exciting times of my life. Don't let anyone tell you that it's a dull place - not with all those foreign i.e. non-Swiss girls, working in the international organisations! Ah, yes but that was in my distant and delightfully illspent youth before I discovered the Amiga.

1. If you, Oh lucky Swiss resident, want a subscription that has the CD on it, then inform AUI Subscription Department and they can, I'm sure make sure that is what you will get.

2. You can send AUI an international, in other words sterling value, money order for £2 and we will send you the disc.

Nothing could be simpler, could it? And give my regards to the Water Spout and the Moven Pick cafe in Geneva.

Dear AUI,

Well you finally blew it!

I have been reading AUI for years and Commodore User International for years before that, but no more. As a WB1.3 user I find that your reluctance to support this machine with your cover disks and articles has now driven me away from your mag. I understand that there comes a time when everyone will need to upgrade their computers and I have no doubt that I will do the same, but surely the A1200 has not been on the market long enough to declare the A500 dead!

At the moment, I am loathe to change my computer as I have spent a long time and many pounds building up my system which consists of 4 meg memory, 40 meg hard drive, 2 floppies, 24 pin printer and somewhere in the region of 400 disks. To upgrade would mean losing a lot of software and probably hardware too and for what? An improved chip set, better graphics and more speed? I don't believe it's worth the hassle. From what I've seen and read, the 'improved' programs such as Wordworth 3 have been disappointing to say the least, so why go to the expense of upgrading? I have used many word processors over the years and I have found that out of them all I use Pen Pal, which is great for mail merging, and for sheer power as a word processor I stick to the trusty old Protext. I wouldn't give you tuppence for Wordworth or Kind Words despite the media hype.

Anyway, as a once faithful WB1.3 using reader of your mag I now feel that I have been discarded by you in favour of what you may call progress. So it just remains for me to bid you a reluctant but I feel necessary farewell.

Vic Storey
Dereham
Norfolk

Dear Vic,

A girl I know who lived in Norfolk for quite a long time has told me lots of stories about the peculiarities of the Norfolkians (Norfolkese? Nor-

folk?). But sticking to an antiquated system come hell, high water or lots of lovely SuperDisks must be one of the most peculiar of all.

Why, these days, do we include virtually only 2.0 and above stuff on our Coverdisks? Just to frustrate Norfolkians? No. Because those ornery programmers out there who are burning up the midnight oil creatively writing Amiga things which we put on disks for the benefit of readers like you, Norfolk Vic, simply are not writing them on 1.3 machines. Or even for 1.3 machines. Would you, these days, Old Vic? (Any relation to the theatre? No? I thought not.)

When you write software that supports 1.3, you can't use all those luscious features that are available to us lucky people with 2.0 and above. And to use the 1.3 system you will have to come up with much bigger and substantially slower applications than the Amiga has any reason to use nowadays. Applications like that, for the 1.3 to do things that are easy on 2.0 and above have to perform all sorts of trickery which is likely to make the programs written in this way much, much less reliable.

Is that the kind of prog you want us to offer, young Vic? (Any relation to the theatre? No? I thought not.) Is that what you ardently desire, Vic?

It's certainly not typical of the lovely proggies that we put on our Coverdisk - as you would find if you were able to use them.

No, of course, you don't want to lose what you have but the printer and the 400 disks are very likely to function with no difficulty on an upgraded Amiga.

The hard drive might be transferable too. So you are left with the problem of the A500 itself. Now don't tell me that upgrading that to 2.0, is beyond the capability of a sensible Amiga user like you - who has obviously been around the pearl of computers for years. So many years, in fact, that you remember a magazine that never existed. (Commodore USER International? No way. Vicky! Commodore USER is now what is unpleasantly called "CU Amiga" and the only connection that that maga-

zine has with what I think you mean, "Commodore COMPUTING International", is that Tony (Shoot 'Em All Up) Horgan - now on "CU" used to work on CCI when he was but a mere lad. And now he has, we trust, started to shave as well as play with his sequencer.)

Yes, Vicko, the world out there is waiting for you to catch it up. The universe is inhabited by Amiga programmers who pour in the progs of their genius to us every month. They are agog and pregnant with goodies just for you when all you have to do to obtain their gems is grow up, move up, jump up - White Men, especially Amiga users, CAN jump! To that platform in the sky, that paradise of 2.0 and of course, ABOVE!

Face it, friend Vic, (Any relation to the Queen? No? I thought not.) don't be an ex-reader, be an ex-antique dealer. The 1.3 - particularly with the Amiga world changing, even collapsing, with Commodore's downfall - the good old 500 is a dead duck, it's obsolete, it's moribund, it's deceasing, it has kicked - or at least is kicking - the proverbial bucket, it is a late computer, an ex-machine and, sorry to tell about a fine piece of engineering, without 2.0 and ABOVE, it's very nearly door-stopping material, shortly to enter the great cupboard up there in the computer sky.

So don't deprive yourself of the refreshing draught (draft?) of the most scalpel sharp Amiga publication in the known universe, consult some kind chap or chapess like Brian Fowler - in his case, I am assured, chap - and get yourself into the nineties and quit the austerities of the once blessed 500 and its creaking 1.3 and see out the century in the voluptuousness of the future, the ABOVE! Or, Victor Ludoram, as the current phrase has it, Get A Life! Get an upgrade!

Dear AUI,

Having now been an Amiga user for the best part of a year, I would like to comment on the Cover disk (July 1994) and say thank you for putting me in my place. Why? In the magazine it says, "Do NOT click on the SuperDisk install icon". On the disk there is a 'Read_me_first!' file which also tells you not to click on the icon....what do I do? Yes, you guessed, I am a muppet!

I was going to write this month anyway because I am getting sick and tired of reading all the queries which start off with "I cannot get the SuperDisk program to run!" You must get really sick of telling people why and even if you're not, I am. The new system works really well though, much clearer and quicker to use, although I never had that many problems (where is that library!) with the other one. I find the 'what does this button do?' approach normally does the trick.

Well, good luck with this one, I am quite sure that you will soon

write to reply

C O N T I N U E D

be inundated with how does it work questions all too quickly and before people start attacking me in the street, this is the first Amiga (A1200) I have owned. If people who are having problems cannot be bothered to take a little time and exercise the grey matter, then buy a Mega Drive. You just plug it in and go! Sounds like an ad. slogan!!!

Mark L. Bryant
Hove
E. Sussex

Dear Mark,

Yes, indeedly. You are a natch as a commercial copywriter, I shall immediately recommend you to Commodore (Who he now?). If you are a muppet, good on you too. You and your like have brought more pleasure to more people than the Nine O'C news ever did.

Yes, there are some real.... well, muppets out there who find the keyboard a difficult place to move around. The mouse? Doesn't it bite and leave droppings about? And install? Don't that mean some place to keep an horse?

SuperDisk? More likely supperdisk... Still though you're right about the need to spend some time to familiarise yourself with the mass of eccentricities that masquerade as modern science under the name of "Operating System" in a computer, there is a law that says if anything can go wrong with a computer it will, twice, and at the very worst moment. And fingers will become thumbs and then drop off when faced with decrunching and other ghastly tasks - ghastly at least for those for whom the computer is not a pleasant playground but, potentially, a slough of despond.

Still Uncle Andy, apart from an occasional scream of rage and an explosion of horror that shakes inner Lonndon from Barkingside to Scotland Yard, solves them all with admirable sang-froid, doesn't he?

And as ex-muppets, you and me, Mark, I know, will never need his assistance again, ever, will we? Will we? Will we?

Dear AUI,

I am most annoyed in the way that the 'unwritten rule' of Public Domain is being flouted by one and all. Many of the demo groups are also raising objection that their created delights are being made into profit by others. More and more demos are featuring messages saying

their demo is not to be sold by a PD library without the author's consent, and then only for a specified amount, i.e. smaller than two quid.

So we are agreed that Public Domain is free? Therefore why does your scoring take into account Value for Money (July 1994/AUI, Page 112). Are you saying if a PD games cost three pounds for a PD Library, and is pretty darn good, that it is good value for money?

To be good value for money, you must be getting something that is worth paying for? Hold on though, PD is free, isn't it, so what are you paying for and who are you paying? What you are saying is that PD is free, so paying three pounds for a floppy disk, the PD Library's advertising costs, and possibly their wages is good value for money? I think there is something unethical there don't you?

How can PD Libraries such as Virus Free PD and Epic charge three pounds for one disk of PD, whereas 17 Bit can provide the same disk for £1.50. I think an investigation is warranted by the Amiga owners Champion, AUI.

Apart from the niggles about your scoring, I thought AUI July 94 was excellent, the CD was fabulous. However, K.P. Kitching was a complete Smeghead. First he/she was talking out of the rear end of a donkey about multimedia, only to be put in their place by AUI. K.P. Kitching owns 'an ageing 1500 with, you guessed it, a Toshiba CD-ROM', well, you said it pal, 'ageing'. Not everyone wants to access PC and MAC CD's. I own a CD32 and an A1200, and I am not just a gaming junky, I have the CD serial link, and own quite a few AMIGA PD CD's.

As for John Kendrick's A1200 and A500 being far more useful than a CD32, why not junk the A500 and buy a CD32 with the proceeds? Then you get the best of both worlds. People are often afraid of new advances. What will Mr. Kendrick do when the A500 becomes obsolete, the A1200 is surpassed by the A9999, and the CD32 is treated like the C64?

Right, now a dig at yourselves. WHAT ON EARTH WERE YOU THINKING ABOUT GIVING TOTAL CARNAGE 88%????? It ranks alongside

Dangerous Streets as one of the worst cases of magnetic media wastage in the world?? Enemy sprites that look like they have got wooden legs piling in single file at a stream of your bullets. Losing a life when you touch their blood entrails. Lousy collision detection, 2 frame animations of enemies, sound that appears to use only one channel, are you mad?? I hope this is a case of the reviewer going on a visit to rainbow land trip out city. I pray that your highly beloved counterparts on Amiga CD! don't catch the same trip when reviewing Frontier CD32. Every other mag has given it 90 odd percent when all you get for your £29.99 is a 650k A500 port on a 650MB CD! Value for money?

Yours completely thankful that I have got the above off my chest even if my letter is not printed. Vark.

P.S. Yes, it is me, of Vark Utils 4. 66%, not bad I suppose seeing as I did not intend for it to be reviewed. Try ringing up Virus Free PD and see how many of the utils on Vark Utils 4 are available on their own individual disk for £3!

Julian Smith
Sheffield
S. Yorkshire

Dear Julian (or should I say Mr Vark Smith?)

The point you raise about PD is a fascinating one. Public Domain. If applied to traditional literature means that something is out of copyright, generally because the author has been dead for more than 50 years. Yet for computers, it is usually signifies material that has been placed by the author(s) as available to the public - FREE.

But what happens when someone takes the trouble to collect the material and offer it for sale? Well, the same as when the Oxford University Press prints Bibles or someone publishes Shakespeare. The book buyer pays money for what is in the public domain but sold commercially.

Is there any difference between that and PD on the Amiga? Not much, I think. Public Domain libraries collect material and duplicate disks. They spend money on that and advertising their wares. They then require a financial return. How they price themselves is up to them and if they sell disks depends on the willingness of the person who wants to purchase the material to pay the price demanded.

It's the sellers and buyers who determine the prices, we only comment with the personal view we take of the value of the program in regard to the official price put on it.

However, if the very generous and publicly minded authors of the PD material place any restrictions on its distribution whether in price or any other condition, then, in

reality, the material becomes something other than (free) public domain. And if that is the case then, of course, whoever is selling such material is, it would appear to me, in effect entering into some form of contract and must abide by the conditions imposed or stand the chance of ending up in Court for breach of contract.

I think everyone, including PD companies should stick to their word or be made to suffer for it.

(Mr Justice Bud Cocklecarrot-Vennos will sit again in the Computer High Court in January 1999.)

As for your other points, yes, people are afraid of new ideas and things. It's not always the money - go into any pub and see the cash poured down throats at couple of pounds a glass when no-one is thirsty - it's fear of the unknown and the shame of maybe looking foolish at not being able to solve what are probably simple problems to someone else. For example, the classic middle aged syndrome of not being able to programme a video recorder, which is why Video Plus has proved such a winner. But this country and its people are notoriously bad at accepting anything that hasn't been done for hundreds of years. Even UK Amiga users, nine tenths of whom are still said to be without hard drives while nine tenths of US Amigaoids do have HDs. What does that say about us?

Total Carnage? 88%? Andy Moss who did the review is one of the oldest - sorry, most experienced - hands in the games reviewing business. It's not easy to con him. If you don't like Total C., that's just your personal opinion - as Andy's and all reviewers' are theirs.

Dear AUI,

Having decided that I buy too many Amiga magazines (and most of the others are always giving you 3 or 4D programs or a continual supply of spreadsheets), I had decided that at least yours was more of a constant supply of good and quite useful Utilities and (Via the magazine itself) good information, and will nevertheless keep buying yours anyway.

I must admit to one small gripe though and that's the bad habit of supplying the CD attached to the front of the magazine.

Admittedly to some it must be good "WHAT A FREE CD" but to myself and many others who don't possess a 32 Bit CD player they are a constant source of annoyance.

Possibly the CD32 IS the best thing since sliced bread, but when you have to go to a High St. retailer who doesn't know is A___ from his elbow, for a demonstration of this supposedly wonderful machine in order to get your other disk of goodies (Which one salesman said they didn't have any but after insisting that an-

other had told me they were locked in a drawer in the office he finally went and found) you leave thinking the machine's crap anyway.

It may be brilliant but unless someone who knows how to use it (it looks pretty simple) demonstrates it, it ain't not gonna sell this knocking another nail in the coffin of Commodore. Another couple of small points are that, if I were to be impressed with the CD32 they have nicked the CDs anyway so I have lost the 3 that I could have started with. Comets say you have to swap the CD for the disk, which is what I wanted in the first place, and as he didn't even know where to look for the info in the credits to see if I had won a CD32 what chance does the public stand? They could say nope sorry you don't win and gain a machine for themselves! They did say on the first one they know a winner because it was Gold on both sides - but we didn't know that.

Apart from all else it's OK for an old git like me to trundle off 4 miles to the nearest Comet dealer (last time 20 miles to the nearest Rumbelows dealer who didn't even know how to load it let alone demonstrate it and also knew nothing of the replacement disk) as I have me motorized perambulator, but this can't be much fun for the majority of the nation - unemployed and on their bikes.

Anyway, gripes out of the way, keep up at least your good supply of info and disks and perhaps if I get a good demo of the CD32 I'll connect one one day to me 4000/30.

T. Rouse
Ramsgate
Kent

Dear T. Rouse,
Everything you say is probably right. Chain stores simply don't have the staff trained to know their joystick from their caps lock. That's one of their troubles with any piece of equipment but especially true where computers are concerned. We weren't all enchanted by the idea of making people swim into these wells of ignorance to swap for the SuperDisk. It probably was a good idea the first and even the second time just to get the hardened cynics of this Amiga world to go and try CBM's new baby - you are not included in that category, of course! But there should have been an option offered to readers. And, in fact, anyone who has contacted us has been sent the SuperDisk they wanted. But sometimes the powers that be don't think things through, do they?

Dear AUI,
Having completed the 15 mile journey to my nearest Comet, I was extremely miffed to find that I had to lose my CD to get the SuperDisk.

As I intend to get a CD1200, I feel I have lost out on this, so can you send me another Cover CD #3?

And please improve future "offers" like this so that either
A) Both disks and the CD are on the cover.

B) Taking a trip to Comet doesn't involve losing the CD.

(Rumbelows gave me the disk & Cover CD No.2)
Yours,

David Jones
MidGlam
South Waks

Dear Amiga CD Magazine

I am writing to you because I am very disappointed. I got your CD No.3 and took it to my local Comet store where I was expecting to be shown a demonstration. The store manager said they had sold the television for the CD32. (What?!? ED)

They would not give me a demo and then he told me I hadn't won because the winning disk was gold on the back. I can not travel as I am ill and was really let down by the store manager and at not getting a demonstration so I kept the CD and am letting you know, so if you get any more letters or complaints you will know why. I like your magazine but was most disappointed as they would not get a replacement television to show me the demonstration.

N D Mountain
West Yorkshire

Dear AUI,

I've bought your mag for a few years; it's a little hard saving up as I am out of work. Well, what a surprise when I have the chance to win a CD32 which I would like to own and maybe save up for one day. The next day I took the CD to Comet in Halifax, they were not very helpful at all. They had the Cd32 on display and when I asked for a demonstration they said they had sold the monitor.

I wanted to test the CD. They would not connect another monitor or TV to the system. I would not swap the CD for the cover disk, then they looked at the CD and said I have not won. I asked what they meant. "If its gold on the back you have won."

Well, this did disappoint me, all my hopes of winning were gone.

Now I know why the winning ones are gold on the back, this would make spotting the winning disk very easy. If I saw a disc with a gold back and three more with silver, I know which one I would buy. What gives Comet the right without testing the CD to say I have not won the CD32? Are they gold on the back or is it Comet lying? If I did swap it for SuperDisk 40 what if I had won, then who would get the CD32? Not me. You called them "ever charming assistants". I don't think so. I hope you print this letter so no one else

will have this problem. I feel very let down by Comet. Comet in Halifax that is. Let me know if the CDs are gold on the back and I will visit all the paper shops all over Halifax, who knows - I may visit and win!

Yours very sad, very upset,
very depressed,

R Swain
Halifax
West Yorkshire

Dear N.D.Mountain, David Jones, R.Swan,

Well, all I can do is apologise to all three of you. Why stores should act in the way you describe is beyond me. It is disgusting and disappointing. They surely won't gain customers like that, will they?

It is certainly true that the winning discs were gold on the back - they were actually the original master discs and it was done that way so that it would be easy and uncontested to see who the winners were, but I can assure that it wasn't all that simple to find the winning discs. We know that because there are still prizes to be claimed! (Why not look around for them?)

We have arranged for you to be sent the appropriate SuperDisks and I am told, by the powers that be, that you won't have to go through the same problems again as the store exchange idea is now "inoperative". The arrangement to exchange the discs was made to help everyone. If it didn't turn out that way, let me humbly apologise of behalf of AUI. We'll try to do better in the future though we really had no control over the way that shop assistants behaved. If we had... You can imagine what punishment we would have meted out!

Dear AUI,

I have been using an Amiga for about six months now, and I freely admit that a lot of my problems have been solved by reading the "Problems" pages of this and other magazines. However, I think that even after only six issues, it is quite obvious that every month you receive numerous letters from very inexperienced people trying to unarchive cover disks. Obviously this problem is never going to go away, unless the process is made so simple that it cannot possibly go wrong, i.e.

insert disk, click on icon, whirr, screen says insert blank disk, whirr, screen says insert cover disk....until finished. I fully understand the problems these people are having, they are me six months ago and the Amiga needs these people. They are the people who will be writing our software in a few years, but do we have to read lots of letters all with basically the same problem? You could dedicate one page in every issue to the de-archiving of cover disks from the previous months mag, and put a few more problems in for those of us who are past that stage.

I understand that you have problems putting the mag together and getting it out on time etc., but please try and understand that these pages are very important to a lot of us readers and getting two pages of cover disk blah out of four pages is disappointing to say the least. I honestly believe that another few pages would really be welcomed by most readers.

That's it. I feel much better now. Thanks for your time and effort. I generally enjoy the mag and its contents.

Brian Rees
Bristol

Dear Brian,

Yes, we all think we have passed through the apprentice to expert stages - only to find that we aren't so expert after all in my case! - but unfortunately we generally look back without total sympathy towards those following in our footsteps. As you say, the pages solving other people's problems helped you and they are doubtless helping others even if you've passed that stage.

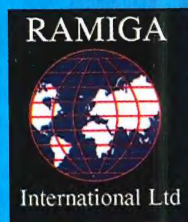
We have anyway increased the number of pages devoted to "Answers" - poor old Uncle Andy is being worked to the bone! So there should be enough to satisfy you that you are getting all the info YOU need. But it seems in any case that more and more people are becoming sufficiently familiar - or Uncle Andy has provided so many answers - that we are getting far fewer letters needing help with the dreaded uncrunching.

(Cacophonous and very nasty crunching sounds as the Vennos drive finally seizes up!)

Send your letters to:
Write to Reply
AUI

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48 George Street, London W1H 5RT

If you wish to send an Email letter to Write to Reply or Amiga Answers, **AUI** can be contacted on CIX as **Amigauser@compulink.co.uk**



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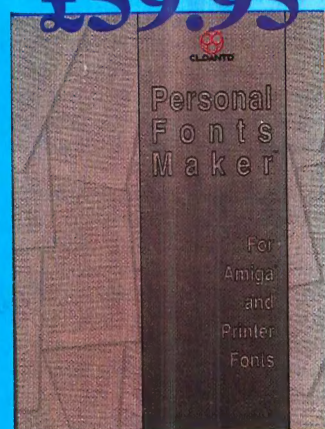
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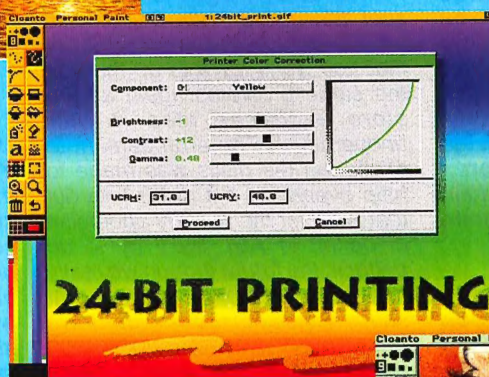
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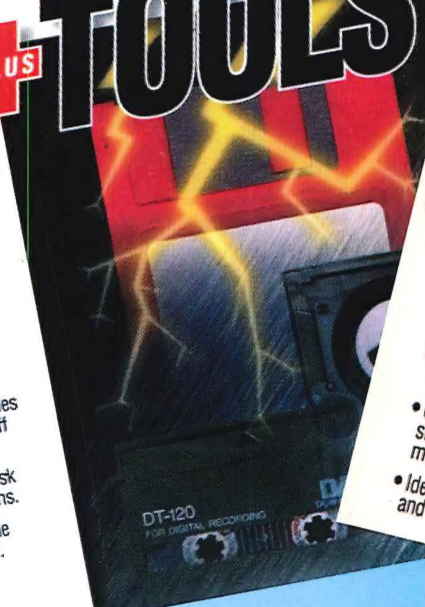
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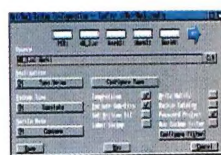
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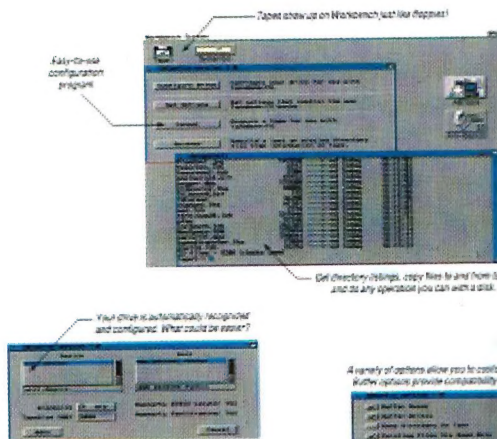
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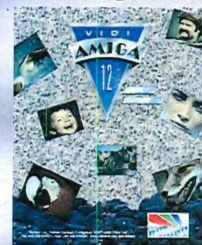
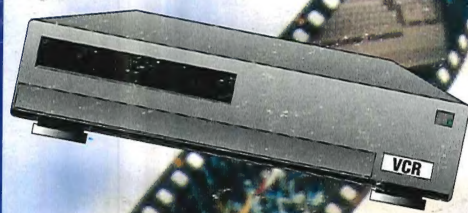
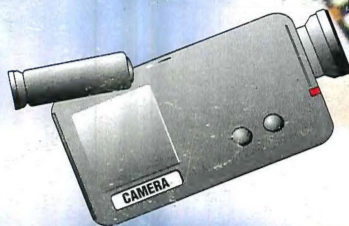
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